



SRC-PE Software

CLI Command Reference, Volume 2

Release 2.0.x

Juniper Networks, Inc.

1194 North Mathilda Avenue
Sunnyvale, CA 94089

USA

408-745-2000

www.juniper.net

Juniper Networks, the Juniper Networks logo, NetScreen, and ScreenOS are registered trademarks of Juniper Networks, Inc. in the United States and other countries. JUNOS and JUNOSe are trademarks of Juniper Networks, Inc. All other trademarks, service marks, registered trademarks, or registered service marks are the property of their respective owners.

Juniper Networks assumes no responsibility for any inaccuracies in this document. Juniper Networks reserves the right to change, modify, transfer, or otherwise revise this publication without notice.

This product includes the following software: Fontconfig, X FreeType library, X Render extension headers, and X Render extension library, copyright © 2001, 2003 Keith Packard.

Permission to use, copy, modify, distribute, and sell this software and its documentation for any purpose is hereby granted without fee, provided that the above copyright notice appear in all copies and that both that copyright notice and this permission notice appear in supporting documentation, and that the name of Keith Packard not be used in advertising or publicity pertaining to distribution of the software without specific, written prior permission. Keith Packard makes no representations about the suitability of this software for any purpose. It is provided "as is" without express or implied warranty.

KEITH PACKARD DISCLAIMS ALL WARRANTIES WITH REGARD TO THIS SOFTWARE, INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS, IN NO EVENT SHALL KEITH PACKARD BE LIABLE FOR ANY SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE.

Products made or sold by Juniper Networks (including the ERX-310, ERX-705, ERX-710, ERX-1410, ERX-1440, M5, M7i, M10, M10i, M20, M40, M40e, M160, M320, and T320 routers, T640 routing node, and the JUNOS, JUNOSe, and SDX-300 software) or components thereof might be covered by one or more of the following patents that are owned by or licensed to Juniper Networks: U.S. Patent Nos. 5,473,599, 5,905,725, 5,909,440, 6,192,051, 6,333,650, 6,359,479, 6,406,312, 6,429,706, 6,459,579, 6,493,347, 6,538,518, 6,538,899, 6,552,918, 6,567,902, 6,578,186, and 6,590,785.

Copyright © 2007, Juniper Networks, Inc.
All rights reserved. Printed in USA.

SRC-PE Software CLI Command Reference, Volume 2, Release 2.0.x
Writing: Linda Creed, Justine Kangas, Betty Lew
Editing: Fran Mues
Cover Design: Edmonds Design

Revision History
11 October 2007—Revision 1

The information in this document is current as of the date listed in the revision history.

Software License

The terms and conditions for using this software are described in the software license contained in the acknowledgment to your purchase order or, to the extent applicable, to any reseller agreement or end-user purchase agreement executed between you and Juniper Networks. By using this software, you indicate that you understand and agree to be bound by those terms and conditions.

Generally speaking, the software license restricts the manner in which you are permitted to use the software and may contain prohibitions against certain uses. The software license may state conditions under which the license is automatically terminated. You should consult the license for further details.

For complete product documentation, please see the Juniper Networks Web site at www.juniper.net/techpubs.

END USER LICENSE AGREEMENT

READ THIS END USER LICENSE AGREEMENT ("AGREEMENT") BEFORE DOWNLOADING, INSTALLING, OR USING THE SOFTWARE. BY DOWNLOADING, INSTALLING, OR USING THE SOFTWARE OR OTHERWISE EXPRESSING YOUR AGREEMENT TO THE TERMS CONTAINED HEREIN, YOU (AS CUSTOMER OR IF YOU ARE NOT THE CUSTOMER, AS A REPRESENTATIVE/AGENT AUTHORIZED TO BIND THE CUSTOMER) CONSENT TO BE BOUND BY THIS AGREEMENT. IF YOU DO NOT OR CANNOT AGREE TO THE TERMS CONTAINED HEREIN, THEN (A) DO NOT DOWNLOAD, INSTALL, OR USE THE SOFTWARE, AND (B) YOU MAY CONTACT JUNIPER NETWORKS REGARDING LICENSE TERMS.

- 1. The Parties.** The parties to this Agreement are Juniper Networks, Inc. and its subsidiaries (collectively "Juniper"), and the person or organization that originally purchased from Juniper or an authorized Juniper reseller the applicable license(s) for use of the Software ("Customer") (collectively, the "Parties").
- 2. The Software.** In this Agreement, "Software" means the program modules and features of the Juniper or Juniper-supplied software, and updates and releases of such software, for which Customer has paid the applicable license or support fees to Juniper or an authorized Juniper reseller. "Embedded Software" means Software which Juniper has embedded in the Juniper equipment.
- 3. License Grant.** Subject to payment of the applicable fees and the limitations and restrictions set forth herein, Juniper grants to Customer a non-exclusive and non-transferable license, without right to sublicense, to use the Software, in executable form only, subject to the following use restrictions:
 - a. Customer shall use the Embedded Software solely as embedded in, and for execution on, Juniper equipment originally purchased by Customer from Juniper or an authorized Juniper reseller.
 - b. Customer shall use the Software on a single hardware chassis having a single processing unit, or as many chassis or processing units for which Customer has paid the applicable license fees; provided, however, with respect to the Steel-Belted Radius or Odyssey Access Client software only, Customer shall use such Software on a single computer containing a single physical random access memory space and containing any number of processors. Use of the Steel-Belted Radius software on multiple computers requires multiple licenses, regardless of whether such computers are physically contained on a single chassis.
 - c. Product purchase documents, paper or electronic user documentation, and/or the particular licenses purchased by Customer may specify limits to Customer's use of the Software. Such limits may restrict use to a maximum number of seats, registered endpoints, concurrent users, sessions, calls, connections, subscribers, clusters, nodes, realms, devices, links, ports or transactions, or require the purchase of separate licenses to use particular features, functionalities, services, applications, operations, or capabilities, or provide throughput, performance, configuration, bandwidth, interface,

processing, temporal, or geographical limits. In addition, such limits may restrict the use of the Software to managing certain kinds of networks or require the Software to be used only in conjunction with other specific Software. Customer's use of the Software shall be subject to all such limitations and purchase of all applicable licenses.

- d. For any trial copy of the Software, Customer's right to use the Software expires 30 days after download, installation or use of the Software. Customer may operate the Software after the 30-day trial period only if Customer pays for a license to do so. Customer may not extend or create an additional trial period by re-installing the Software after the 30-day trial period.
- e. The Global Enterprise Edition of the Steel-Belted Radius software may be used by Customer only to manage access to Customer's enterprise network. Specifically, service provider customers are expressly prohibited from using the Global Enterprise Edition of the Steel-Belted Radius software to support any commercial network access services.

The foregoing license is not transferable or assignable by Customer. No license is granted herein to any user who did not originally purchase the applicable license(s) for the Software from Juniper or an authorized Juniper reseller.

4. Use Prohibitions. Notwithstanding the foregoing, the license provided herein does not permit the Customer to, and Customer agrees not to and shall not: (a) modify, unbundle, reverse engineer, or create derivative works based on the Software; (b) make unauthorized copies of the Software (except as necessary for backup purposes); (c) rent, sell, transfer, or grant any rights in and to any copy of the Software, in any form, to any third party; (d) remove any proprietary notices, labels, or marks on or in any copy of the Software or any product in which the Software is embedded; (e) distribute any copy of the Software to any third party, including as may be embedded in Juniper equipment sold in the secondhand market; (f) use any 'locked' or key-restricted feature, function, service, application, operation, or capability without first purchasing the applicable license(s) and obtaining a valid key from Juniper, even if such feature, function, service, application, operation, or capability is enabled without a key; (g) distribute any key for the Software provided by Juniper to any third party; (h) use the Software in any manner that extends or is broader than the uses purchased by Customer from Juniper or an authorized Juniper reseller; (i) use the Embedded Software on non-Juniper equipment; (j) use the Software (or make it available for use) on Juniper equipment that the Customer did not originally purchase from Juniper or an authorized Juniper reseller; (k) disclose the results of testing or benchmarking of the Software to any third party without the prior written consent of Juniper; or (l) use the Software in any manner other than as expressly provided herein.

5. Audit. Customer shall maintain accurate records as necessary to verify compliance with this Agreement. Upon request by Juniper, Customer shall furnish such records to Juniper and certify its compliance with this Agreement.

6. Confidentiality. The Parties agree that aspects of the Software and associated documentation are the confidential property of Juniper. As such, Customer shall exercise all reasonable commercial efforts to maintain the Software and associated documentation in confidence, which at a minimum includes restricting access to the Software to Customer employees and contractors having a need to use the Software for Customer's internal business purposes.

7. Ownership. Juniper and Juniper's licensors, respectively, retain ownership of all right, title, and interest (including copyright) in and to the Software, associated documentation, and all copies of the Software. Nothing in this Agreement constitutes a transfer or conveyance of any right, title, or interest in the Software or associated documentation, or a sale of the Software, associated documentation, or copies of the Software.

8. Warranty, Limitation of Liability, Disclaimer of Warranty. The warranty applicable to the Software shall be as set forth in the warranty statement that accompanies the Software (the "Warranty Statement"). Nothing in this Agreement shall give rise to any obligation to support the Software. Support services may be purchased separately. Any such support shall be governed by a separate, written support services agreement. TO THE MAXIMUM EXTENT PERMITTED BY LAW, JUNIPER SHALL NOT BE LIABLE FOR ANY LOST PROFITS, LOSS OF DATA, OR COSTS OR PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES, OR FOR ANY SPECIAL, INDIRECT, OR CONSEQUENTIAL DAMAGES ARISING OUT OF THIS AGREEMENT, THE SOFTWARE, OR ANY JUNIPER OR JUNIPER-SUPPLIED SOFTWARE. IN NO EVENT SHALL JUNIPER BE LIABLE FOR DAMAGES ARISING FROM UNAUTHORIZED OR IMPROPER USE OF ANY JUNIPER OR JUNIPER-SUPPLIED SOFTWARE. EXCEPT AS EXPRESSLY PROVIDED IN THE WARRANTY STATEMENT TO THE EXTENT PERMITTED BY LAW, JUNIPER DISCLAIMS ANY AND ALL WARRANTIES IN AND TO THE SOFTWARE (WHETHER EXPRESS, IMPLIED, STATUTORY, OR OTHERWISE), INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NON-INFRINGEMENT. IN NO EVENT DOES JUNIPER WARRANT THAT THE SOFTWARE, OR ANY EQUIPMENT OR NETWORK RUNNING THE SOFTWARE, WILL OPERATE WITHOUT ERROR OR INTERRUPTION, OR WILL BE FREE OF VULNERABILITY TO INTRUSION OR ATTACK. In no event shall Juniper's or its suppliers' or licensors' liability to Customer, whether in contract, tort (including negligence), breach of warranty, or otherwise, exceed the price paid by Customer for the Software that gave rise to the claim, or if the Software is embedded in another Juniper product, the price paid by Customer for such other product. Customer acknowledges and agrees that Juniper has set its prices and entered into this Agreement in reliance upon the disclaimers of warranty and the limitations of liability set forth herein, that the same reflect an allocation of risk between the Parties (including the risk that a contract remedy may fail of its essential purpose and cause consequential loss), and that the same form an essential basis of the bargain between the Parties.

9. Termination. Any breach of this Agreement or failure by Customer to pay any applicable fees due shall result in automatic termination of the license granted herein. Upon such termination, Customer shall destroy or return to Juniper all copies of the Software and related documentation in Customer's possession or control.

10. Taxes. All license fees for the Software are exclusive of taxes, withholdings, duties, or levies (collectively "Taxes"). Customer shall be responsible for paying Taxes arising from the purchase of the license, or importation or use of the Software.

11. Export. Customer agrees to comply with all applicable export laws and restrictions and regulations of any United States and any applicable foreign agency or authority, and not to export or re-export the Software or any direct product thereof in violation of any such restrictions, laws or regulations, or without all necessary approvals. Customer shall be liable for any such violations. The version of the Software supplied to Customer may contain encryption or other capabilities restricting Customer's ability to export the Software without an export license.

12. Commercial Computer Software. The Software is "commercial computer software" and is provided with restricted rights. Use, duplication, or disclosure by the United States government is subject to restrictions set forth in this Agreement and as provided in DFARS 227.7201 through 227.7202-4, FAR 12.212, FAR 27.405(b)(2), FAR 52.227-19, or FAR 52.227-14(ALT III) as applicable.

13. Interface Information. To the extent required by applicable law, and at Customer's written request, Juniper shall provide Customer with the interface information needed to achieve interoperability between the Software and another independently created program, on payment of applicable fee, if any. Customer shall observe strict obligations of confidentiality with respect to such information and shall use such information in compliance with any applicable terms and conditions upon which Juniper makes such information available.

14. Third Party Software. Any licensor of Juniper whose software is embedded in the Software and any supplier of Juniper whose products or technology are embedded in (or services are accessed by) the Software shall be a third party beneficiary with respect to this Agreement, and such licensor or vendor shall have the right to enforce this Agreement in its own name as if it were Juniper. In addition, certain third party software may be provided with the Software and is subject to the accompanying license(s), if any, of its respective owner(s). To the extent portions of the Software are distributed under and subject to open source licenses obligating Juniper to make the source code for such portions publicly available (such as the GNU General Public License ("GPL") or the GNU Library General Public License ("LGPL")), Juniper will make such source code portions (including Juniper modifications, as appropriate) available upon request for a period of up to three years from the date of distribution. Such request can be made in writing to Juniper Networks, Inc., 1194 N. Mathilda Ave., Sunnyvale, CA 94089, ATTN: General Counsel. You may obtain a copy of the GPL at <http://www.gnu.org/licenses/gpl.html>, and a copy of the LGPL at <http://www.gnu.org/licenses/lgpl.html>.

15. Miscellaneous. This Agreement shall be governed by the laws of the State of California without reference to its conflicts of laws principles. The provisions of the U.N. Convention for the International Sale of Goods shall not apply to this Agreement. For any disputes arising under this Agreement, the Parties hereby consent to the personal and exclusive jurisdiction of, and venue in, the state and federal courts within Santa Clara County, California. This Agreement constitutes the entire and sole agreement between Juniper and the Customer with respect to the Software, and supersedes all prior and contemporaneous agreements relating to the Software, whether oral or written (including any inconsistent terms contained in a purchase order), except that the terms of a separate written agreement executed by an authorized Juniper representative and Customer shall govern to the extent such terms are inconsistent or conflict with terms contained herein. No modification to this Agreement nor any waiver of any rights hereunder shall be effective unless expressly assented to in writing by the party to be charged. If any portion of this Agreement is held invalid, the Parties agree that such invalidity shall not affect the validity of the remainder of this Agreement. This Agreement and associated documentation has been written in the English language, and the Parties agree that the English version will govern. (For Canada: Les parties aux présentes confirment leur volonté que cette convention de même que tous les documents y compris tout avis qui s'y rattache, soient rédigés en langue anglaise. (Translation: The parties confirm that this Agreement and all related documentation is and will be in the English language)).

About This Guide

This preface provides the following guidelines for using the *SRC-PE Software CLI Command Reference, Volume 2*.

- Objectives on page v
- Audience on page v
- Documentation Conventions on page vi
- Related Juniper Networks Documentation on page vii
- Obtaining Documentation on page ix
- Documentation Feedback on page ix
- Requesting Support on page x

Objectives

This guide provides information about the Session and Resource Control (SRC) command-line interface (CLI). It describes commands and configuration statements for the supported SRC components.



NOTE: If the information in the latest *SRC Release Notes* differs from the information in this guide, follow the *SRC Release Notes*.

Audience

This guide is intended for experienced system and network specialists working with JUNOSe routers and JUNOS routing platforms in an Internet access environment. We assume that readers know how to use the routing platforms, directories, and RADIUS servers that they will deploy in their SRC networks. For users who deploy the SRC software on a Solaris platform, we also assume that readers are familiar with the Lightweight Directory Access Protocol (LDAP) and the UNIX operating system.

If you are using the SRC software in a cable network environment, we assume that you are familiar with the *PacketCable Multimedia Specification* (PCMM) as defined by Cable Television Laboratories, Inc. (CableLabs) and with the Data-over-Cable Service Interface Specifications (DOCSIS) 1.1 protocol. We also assume that you are familiar with operating a multiple service operator (MSO) multimedia-managed IP network.

Documentation Conventions

Table 1 defines notice icons used in this guide. Table 2 defines text conventions used throughout the documentation.

Table 1: Notice Icons

Icon	Meaning	Description
	Informational note	Indicates important features or instructions.
	Caution	Indicates a situation that might result in loss of data or hardware damage.
	Warning	Alerts you to the risk of personal injury.

Table 2: Text Conventions

Convention	Description	Examples
Bold typeface	<ul style="list-style-type: none"> ■ Represents keywords, scripts, and tools in text. ■ Represents a GUI element that the user selects, clicks, checks, or clears. 	<ul style="list-style-type: none"> ■ Specify the keyword exp-msg. ■ Run the install.sh script. ■ Use the pkgadd tool. ■ To cancel the configuration, click Cancel.
Bold sans serif typeface	Represents text that the user must type.	<code>user@host# set cache-entry-age cache-entry-age</code>
Monospace sans serif typeface	Represents information as displayed on your terminal's screen, such as CLI commands in output displays.	<pre>nic-locators { login { resolution { resolver-name /realms/login/A1; key-type LoginName; value-type SaeId; } } }</pre>
Regular sans serif typeface	<ul style="list-style-type: none"> ■ Represents configuration statements. ■ Indicates SRC CLI commands and options in text. ■ Represents examples in procedures. ■ Represents URLs. 	<ul style="list-style-type: none"> ■ <code>system ldap server { stand-alone;</code> ■ Use the <code>request sae modify device failover</code> command with the <code>force</code> option. ■ <code>user@host# . . .</code> ■ http://www.juniper.net/techpubs/software/management/sdx/api-index.html
<i>Italic sans serif typeface</i>	Represents variables in SRC CLI commands.	<code>user@host# set local-address local-address</code>
Angle brackets	In text descriptions, indicate optional keywords or variables.	Another runtime variable is <code><gfwif ></code> .
Key name	Indicates the name of a key on the keyboard.	Press Enter.

Table 2: Text Conventions (continued)

Convention	Description	Examples
Key names linked with a plus sign (+) .	Indicates that you must press two or more keys simultaneously.	Press Ctrl + b.
<i>Italic typeface</i>	<ul style="list-style-type: none"> ■ Emphasizes words. ■ Identifies chapter, appendix, and book names. ■ Identifies distinguished names. ■ Identifies files, directories, and paths in text but not in command examples. 	<ul style="list-style-type: none"> ■ There are two levels of access: <i>user</i> and <i>privileged</i>. ■ <i>Chapter 2, Services</i>. ■ <i>o = Users, o = UMC</i> ■ The <i>/etc/default.properties</i> file.
Backslash	At the end of a line, indicates that the text wraps to the next line.	Plugin.radiusAcct-1.class = \net.juniper.smgmt.sae.plugin\RADIUSTrackingPluginEvent
Words separated by the symbol	Represent a choice to select one keyword or variable to the left or right of this symbol. (The keyword or variable may be either optional or required.)	diagnostic line

Related Juniper Networks Documentation

With each SRC software release, we provide the *SRC Documentation CD*, which contains the documentation described in Table 3.

With each SRC Application Library release, we provide the *SRC Application Library CD*. This CD contains both the software applications and the *SRC Application Library Guide*.

A complete list of abbreviations used in this document set, along with their spelled-out terms, is provided in the *SRC Getting Started Guide*.

Table 3: Juniper Networks C-series and SRC Technical Publications

Document	Description
Core Documentation Set	
<i>C2000 and C4000 Hardware Guide</i>	Describes the hardware platforms and how to install, maintain, replace, and troubleshoot them. The guide also includes specifications.
<i>C2000 and C4000 Quick Start Guide</i>	Describes how to get the C-series Controller up and running quickly. Intended for experienced installers who want to expedite the installation process.
<i>SRC-PE Getting Started Guide</i>	Describes the SRC software, how to set up an initial software configuration, and how to upgrade the SRC software. It also explains how to manage a C-series Controller. The guide describes how to set up and start the SRC CLI and the C-Web interface, as well as other SRC configuration tools. It includes reference material for the SRC documentation.
<i>SRC-PE CLI User Guide</i>	Describes how to use the SRC CLI, configure and monitor the platform with the CLI, and control the CLI environment. The guide also describes how to manage SRC components with the CLI.

Table 3: Juniper Networks C-series and SRC Technical Publications (continued)

Document	Description
<i>SRC-PE Network Guide: SAE, Juniper Networks Routers, NIC, and SRC-ACP</i>	Describes how to use and configure the SAE, the NIC, and the SRC-ACP (Admission Control Plug-In) application. This guide also provides detailed information for using JUNOSe routers and JUNOS routing platforms in the SRC network.
<i>SRC-PE Integration Guide: Network Devices, Directories, and RADIUS Servers</i>	Describes how to integrate external components—network devices, directories, and RADIUS servers—into the SRC network. The guide provides detailed information about integrating specific models of the external components.
<i>SRC-PE Services and Policies Guide</i>	Describes how to work with services and policies. The guide provides an overview, configuration procedures, and management information. The guide also provides information about the SRC tools for configuring policies.
<i>SRC-PE Subscribers and Subscriptions Guide</i>	Describes how to work with residential and enterprise subscribers and subscriptions. The guide provides an overview, configuration procedures, and management information. This guide also provides information about the enterprise service portals, including the Enterprise Manager Portal.
<i>SRC-PE Monitoring and Troubleshooting Guide</i>	Describes how to use logging, the SNMP agent, the SRC CLI, and the C-Web interface to monitor and troubleshoot SRC components. This guide also describes the SNMP traps.
<i>SRC-PE Solutions Guide</i>	Provides high-level instructions for SRC implementations. The guide documents the following scenarios: managing QoS services on JUNOSe routers; managing subscribers in a wireless roaming environment; providing voice over IP (VoIP) services; integrating the SRC software in a PCMM environment, including the use of the Juniper Policy Server (JPS); and mirroring subscriber traffic on JUNOSe routers.
<i>SRC-PE CLI Command Reference, Volume 1</i> <i>SRC-PE CLI Command Reference, Volume 2</i>	Together constitute information about command and statement syntax; descriptions of commands, configuration statements, and options; editing level of statement options; and a history of when a command was added to the documentation.
<i>SRC-PE NETCONF API Guide</i>	Describes how to use the NETCONF application programming interface (API) to configure or request information from the NETCONF server on a C-series Controller that runs the SRC software.
<i>SRC-PE XML API Configuration Reference</i>	Describes the tag elements in the SRC Extensible Markup Language (XML) application programming interface (API) that are equivalent to configuration statements in the SRC command-line interface (SRC CLI).
<i>SRC-PE XML API Operational Reference</i>	Describes the tag elements in the SRC Extensible Markup Language (XML) application programming interface (API) that are equivalent to operational commands in the SRC command-line interface (SRC CLI).
<i>SRC-PE Comprehensive Index</i>	Provides a complete index of the SRC guides, excluding the <i>C-series Hardware Guide</i> , the <i>SRC CLI Command Reference</i> , the <i>SRC-PE NETCONF API Guide</i> , the <i>SRC-PE XML API Configuration Reference</i> , and the <i>SRC-PE XML API Operational Reference</i> .
Application Library	
<i>SRC Application Library Guide</i>	Describes how to install and work with applications that you can use to extend the capabilities of the SRC software. The guide documents the following applications: SRC-SG (SOAP Gateway) Web applications, an application to provide threat mitigation, an application to provide tracking and QoS control at the application level by integrating the SRC software with the Ellacoya deep packet inspection (DPI) platform, and an application to control volume usage.

Table 3: Juniper Networks C-series and SRC Technical Publications (continued)

Document	Description
Release Notes	
<i>SRC-PE Release Notes</i> <i>SRC Application Library Release Notes</i>	In the <i>Release Notes</i> , you will find the latest information about features, changes, known problems, resolved problems, supported platforms and network devices (such as Juniper Networks routers and CMTS devices), and third-party software. If the information in the <i>Release Notes</i> differs from the information found in the documentation set, follow the <i>Release Notes</i> . Release notes are included in the corresponding software distribution and are available on the Web.

Obtaining Documentation

To obtain the most current version of all Juniper Networks technical documentation, see the products documentation page on the Juniper Networks Web site at

<http://www.juniper.net/>

To order printed copies of this manual and other Juniper Networks technical documents or to order a documentation CD, which contains this manual, contact your sales representative.

Documentation Feedback

We encourage you to provide feedback, comments, and suggestions so that we can improve the documentation to better meet your needs. You can send your comments to techpubs-comments@juniper.net, or fill out the documentation feedback form at

<http://www.juniper.net/techpubs/docbug/docbugreport.html>

If you are using e-mail, be sure to include the following information with your comments:

- Document name
- Document part number
- Page number
- Software release version

Requesting Support

For technical support, open a support case using the Case Manager link at

<http://www.juniper.net/support/>

or call 1-888-314-JTAC (from the United States, Canada, or Mexico) or 1-408-745-9500 (from elsewhere).

SRC CLI

This document summarizes the SRC command-line interface (SRC CLI).

Configuration statements and operational commands are listed in alphabetical order for the following components in the *SRC-PE CLI Command Reference, Volume 1*:

- CLI and System
- Juniper Networks Database
- SAE
- Network Information Collector (NIC)
- SNMP Agent
- Juniper Policy Server (JPS)

Configuration statements and operational commands are listed in alphabetical order for the following components in the *SRC-PE CLI Command Reference, Volume 2*:

- Service CLI
- Policy CLI
- Subscriber CLI
- Redirect Server
- SRC Admission Control Plug-In (SRC-ACP)

Service CLI

The following table summarizes the SRC command-line interface (SRC CLI) for configuring services. Configuration statements are listed in alphabetical order.

Service CLI Configuration Statements
services global mutex-group
services global schedule
services global schedule name event
services global schedule name event name action
services global schedule name event name action name attribute
services global schedule name event name except
services global schedule name event name except name from
services global schedule name event name except name to
services global schedule name event name from
services global schedule name event name to
services global service
services global service name admission-control
services global service name aggregate fragment
services global service name parameter
services global service name script
services scope
services scope name mutex-group
services scope name schedule
services scope name schedule name event
services scope name schedule name event name action
services scope name schedule name event name action name attribute

<u>services scope name schedule name event name except</u>
<u>services scope name schedule name event name except name from</u>
<u>services scope name schedule name event name except name to</u>
<u>services scope name schedule name event name from</u>
<u>services scope name schedule name event name to</u>
<u>services scope name service</u>
<u>services scope name service name admission-control</u>
<u>services scope name service name aggregate fragment</u>
<u>services scope name service name parameter</u>
<u>services scope name service name script</u>

services global mutex-group

Syntax

```
services global mutex-group name {
    auto-deactivate (yes | no);
    description description;
    services [services...];
}
```

Hierarchy Level

```
[edit services global mutex-group]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure a mutex group. A mutex group is a collection of services that are mutually exclusive—services that the SAE cannot simultaneously activate for a particular subscriber.

Options

name name— Name of the mutex group.

Value— Text

auto-deactivate (yes | no)— Specify whether to allow activation of a service if another service is already active.

Value

- *yes*— For any one subscriber, the SAE deactivates a service in the group before activating another service in the group.
- *no*— The SAE refuses access to a requested service if the subscriber is already using another service in this group.

Default— Yes

Editing Level—Basic

`description` *description*—(Optional) Description of the mutex group.

Value— Text

Default— No value

Editing Level—Basic

`services` [*services...*]—(Optional) List of services in the mutex group.

Value— List of services

Default— No value

Editing Level—Basic

Required Privilege Level

service

Required Editing Level

Basic

services global schedule

Syntax

```
services global schedule name {
    description description;
}
```

Hierarchy Level

```
[edit services global schedule]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure a service schedule.

Options

name name— Name of service schedule.

Value—Text

description description—(Optional) Description of the service schedule.

Value—Text

Default— No value

Editing Level—Basic

Required Privilege Level

service

Required Editing Level

Basic

services global schedule *name* event

Syntax

```
services global schedule name event name ...
```

Hierarchy Level

```
[edit services global schedule name event]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure a scheduling event.

Options

name name— Name of the scheduling event.

Value—Text

Required Privilege Level

service

Required Editing Level

Basic

services global schedule *name* event *name* action

Syntax

```
services global schedule name event name action name {
    type (activate | deactivate | deny | deny-deactivate);
    service service;
    substitution [substitution...];
}
```

Hierarchy Level

```
[edit services global schedule name event name action]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure actions to perform for the scheduled event.

Options

`name name`— Arbitrary identifier for action.

Value—Text

`type (activate | deactivate | deny | deny-deactivate)`— Type of action.

Value

- `activate`— Activate service at the time specified in the entry schedule.
- `deactivate`— Deactivate service at the time specified in the entry schedule.
- `deny`— Deny new activation requests during the time specified in the entry schedule; current sessions are not affected. This value applies only to services that have an authorization plugin configured.
- `deny-deactivate`— Deny new activation requests during the time specified in the entry schedule; current sessions are deactivated at the specified time. This value applies only to

services that have an authorization plug-in configured.

Default— No value

Editing Level—Basic

`service service`— Name of service affected by this action.

Value—Text

Default— No value

Editing Level—Basic

`substitution [substitution...]`—(Optional) Substitutions to be used when activating the service. Substitutions apply only to service activations.

Value— An entry in valid substitution format. See the *SRC-PE Services and Policies Guide*.

Default— No value

Editing Level—Basic

Required Privilege Level

service

Required Editing Level

Basic

services global schedule *name* event *name* action *name* attribute

Syntax

```
services global schedule name event name action name attribute (sessionName |
sessionTag | sessionTimeout | downStreamBandwidth | upStreamBandwidth) {
    value;
}
```

Hierarchy Level

```
[edit services global schedule name event name action name attribute]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure subscription attributes. Subscription attributes apply only to service activations.

Options

Value

- *sessionName*— Name of the service session.
- *sessionTag*— Tag that can be used for accounting purposes.
- *sessionTimeout*— Session timeout to be used when the service is activated. The service session is deactivated when this timeout expires.
- *downStreamBandwidth*— Attribute used by SRC Admission Control Plug-In (SRC-ACP) to specify the rate of traffic between the network and the subscriber.
- *upStreamBandwidth*— Attribute used by SRC-ACP to specify the rate of traffic between the subscriber and the network.

value— Value of the specified subscription attribute.

Value— Depends on the specified subscription attribute

Default— No value

Editing Level—Basic

Required Privilege Level

service

Required Editing Level

Basic

services global schedule *name* event *name* except

Syntax

```
services global schedule name event name except name ...
```

Hierarchy Level

```
[edit services global schedule name event name except]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure an exclusion for the event.

Options

`name name`—Arbitrary identifier for exclusion rule.

Value—Text

Required Privilege Level

service

Required Editing Level

Basic

services global schedule *name* event *name* except *name* from

Syntax

```
services global schedule name event name except name from {
    hour hour;
    minute minute;
    day-of-month day-of-month;
    day-of-week day-of-week;
    month month;
    year year;
    time-zone time-zone;
}
```

Hierarchy Level

```
[edit services global schedule name event name except name from]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure the start time of the exclusion. For guidelines about entering time values, see the *SRC-PE Services and Policies Guide*.

Options

hour *hour*—(Optional) Hour of the day in the indicated month in which to schedule the event or exclusion.

Value— 0-23

Default— *

Editing Level—Basic

minute *minute*—(Optional) Minutes past the indicated hour in which to schedule the event or exclusion.

Value— 0-59

Default— *

Editing Level—Basic

`day-of-month` *day-of-month*—(Optional) Day of the month in which to schedule the event or exclusion. If you specify both `day-of-month` and `day-of-week`, `day-of-month` is used.

Value— 1-31

Default— *

Editing Level—Basic

`day-of-week` *day-of-week*—(Optional) Day of the week in which to schedule the event or exclusion. If you specify both `day-of-month` and `day-of-week`, `day-of-month` is used.

Value— 0-6, with 0 representing Sunday and each subsequent number representing the next day of the week

Default— *

Editing Level—Basic

`month` *month*—(Optional) Month of the year in which to schedule the event or exclusion.

Value— 1-12

Default— *

Editing Level—Basic

`year` *year*—(Optional) Year in which to schedule the event or exclusion.

Value— Four integers that indicate the year

Default— *

Editing Level—Basic

`time-zone` *time-zone*—(Optional) Name of the time zone to use in the schedule.

Value— One of the following values:

- *—Local time zone of the SAE
- An offset to GMT in the format: GMT (+ |-) (*hh:mm* | *hh mm* | *hh*)
 - *hh*—Hour of the day in the range of 0–23
 - *mm*—Minutes past the hour in the range of 0–59

Default— *

Editing Level—Basic

Required Privilege Level

service

Required Editing Level

Basic

services global schedule *name* event *name* except *name* to

Syntax

```
services global schedule name event name except name to {
    hour hour;
    minute minute;
    day-of-month day-of-month;
    day-of-week day-of-week;
    month month;
    year year;
    time-zone time-zone;
}
```

Hierarchy Level

```
[edit services global schedule name event name except name to]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure the end time of the exclusion. For guidelines about entering time values, see the *SRC-PE Services and Policies Guide*.

These values apply only to services that have an authorization plug-in configured. If an authorization plug-in is not configured for the service associated with the schedule, these values are ignored.

Options

hour *hour*—(Optional) Hour of the day in the indicated month in which to schedule the event or exclusion.

Value— 0-23

Default— *

Editing Level—Basic

minute *minute*—(Optional) Minutes past the indicated hour in which to schedule the event or exclusion.

Value— 0-59

Default— *

Editing Level—Basic

`day-of-month` *day-of-month*—(Optional) Day of the month in which to schedule the event or exclusion. If you specify both `day-of-month` and `day-of-week`, `day-of-month` is used.

Value— 1-31

Default— *

Editing Level—Basic

`day-of-week` *day-of-week*—(Optional) Day of the week in which to schedule the event or exclusion. If you specify both `day-of-month` and `day-of-week`, `day-of-month` is used.

Value— 0-6, with 0 representing Sunday and each subsequent number representing the next day of the week

Default— *

Editing Level—Basic

`month` *month*—(Optional) Month of the year in which to schedule the event or exclusion.

Value— 1-12

Default— *

Editing Level—Basic

`year` *year*—(Optional) Year in which to schedule the event or exclusion.

Value— Four integers that indicate the year

Default— *

Editing Level—Basic

`time-zone` *time-zone*—(Optional) Name of the time zone to use in the schedule.

Value— One of the following values:

- *—Local time zone of the SAE
- An offset to GMT in the format: GMT (+ | -) (*hh:mm* | *hh mm* | *hh*)
 - *hh*—Hour of the day in the range of 0-23
 - *mm*—Minutes past the hour in the range of 0-59

Default— *

Editing Level—Basic

Required Privilege Level

service

Required Editing Level

Basic

services global schedule *name* event *name* from

Syntax

```
services global schedule name event name from {
    effective effective;
    hour hour;
    minute minute;
    day-of-month day-of-month;
    day-of-week day-of-week;
    month month;
    year year;
    time-zone time-zone;
}
```

Hierarchy Level

```
[edit services global schedule name event name from]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure the start time for the event. For guidelines about entering time values, see the *SRC-PE Services and Policies Guide*.

Options

effective effective—(Optional) Interval after the associated *from* or *to* time during which the scheduled action can be initiated by a subscriber who is logging in to a subscriber session.

Value— Number of minutes in the range 0–153722867280912

Default— *

Editing Level—Basic

hour hour—(Optional) Hour of the day in the indicated month in which to schedule the event or exclusion.

Value— 0-23

Default— *

Editing Level—Basic

`minute` *minute*—(Optional) Minutes past the indicated hour in which to schedule the event or exclusion.

Value— 0-59

Default— *

Editing Level—Basic

`day-of-month` *day-of-month*—(Optional) Day of the month in which to schedule the event or exclusion. If you specify both `day-of-month` and `day-of-week`, `day-of-month` is used.

Value— 1-31

Default— *

Editing Level—Basic

`day-of-week` *day-of-week*—(Optional) Day of the week in which to schedule the event or exclusion. If you specify both `day-of-month` and `day-of-week`, `day-of-month` is used.

Value— 0-6, with 0 representing Sunday and each subsequent number representing the next day of the week

Default— *

Editing Level—Basic

`month` *month*—(Optional) Month of the year in which to schedule the event or exclusion.

Value— 1-12

Default— *

Editing Level—Basic

`year` *year*—(Optional) Year in which to schedule the event or exclusion.

Value— Four integers that indicate the year

Default— *

Editing Level—Basic

`time-zone` *time-zone*—(Optional) Name of the time zone to use in the schedule.

Value— One of the following values:

- *—Local time zone of the SAE

- An offset to GMT in the format: GMT (+ | -) (*hh:mm* | *hh mm* | *hh*)
 - *hh*—Hour of the day in the range of 0–23
 - *mm*—Minutes past the hour in the range of 0–59

Default— *

Editing Level—Basic

Required Privilege Level

service

Required Editing Level

Basic

services global schedule *name* event *name* to

Syntax

```
services global schedule name event name to {
    effective effective;
    hour hour;
    minute minute;
    day-of-month day-of-month;
    day-of-week day-of-week;
    month month;
    year year;
    time-zone time-zone;
}
```

Hierarchy Level

```
[edit services global schedule name event name to]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure the end time for the event. For guidelines about entering time values, see the *SRC-PE Services and Policies Guide*.

These values apply only to services that have an authorization plug-in configured. If an authorization plug-in is not configured for the service associated with the schedule, these values are ignored.

Options

effective effective—(Optional) Interval after the associated *from* or *to* time during which the scheduled action can be initiated by a subscriber who is logging in to a subscriber session.

Value— Number of minutes in the range 0-153722867280912

Default— *

Editing Level—Basic

hour hour—(Optional) Hour of the day in the indicated month in which to schedule the event or exclusion.

Value— 0-23
Default— *
Editing Level—Basic

minute *minute*—(Optional) Minutes past the indicated hour in which to schedule the event or exclusion.

Value— 0-59
Default— *
Editing Level—Basic

day-of-month *day-of-month*—(Optional) Day of the month in which to schedule the event or exclusion. If you specify both *day-of-month* and *day-of-week*, *day-of-month* is used.

Value— 1-31
Default— *
Editing Level—Basic

day-of-week *day-of-week*—(Optional) Day of the week in which to schedule the event or exclusion. If you specify both *day-of-month* and *day-of-week*, *day-of-month* is used.

Value— 0-6, with 0 representing Sunday and each subsequent number representing the next day of the week
Default— *
Editing Level—Basic

month *month*—(Optional) Month of the year in which to schedule the event or exclusion.

Value— 1-12
Default— *
Editing Level—Basic

year *year*—(Optional) Year in which to schedule the event or exclusion.

Value— Four integers that indicate the year
Default— *
Editing Level—Basic

time-zone *time-zone*—(Optional) Name of the time zone to use in the schedule.

Value— One of the following values:

- *—Local time zone of the SAE
- An offset to GMT in the format: GMT (+ |-) (*hh:mm* | *hh mm* | *hh*)
 - *hh*—Hour of the day in the range of 0–23
 - *mm*—Minutes past the hour in the range of 0–59

Default— *

Editing Level—Basic

Required Privilege Level

service

Required Editing Level

Basic

services global service

Syntax

```
services global service name {
    description description;
    type (normal | aggregate | script | infrastructure);
    category category;
    url url;
    policy-group policy-group;
    authentication-required;
    authorization-plug-in [authorization-plug-in...];
    tracking-plug-in [tracking-plug-in...];
    session-timeout session-timeout;
    idle-timeout idle-timeout;
    accounting-interim-interval accounting-interim-interval;
    radius-class radius-class;
    status (inactive | active);
    activate-only;
    permanent;
    available;
    secret;
    shared-service-name shared-service-name;
}
```

Hierarchy Level

```
[edit services global service]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure a service.

Options

name *name*— Name of the service.

Value— Text

description *description*—(Optional) Description of the service.

Value— Text
Default— No value
Editing Level—Basic

`type` (`normal` | `aggregate` | `script` | `infrastructure`)— Type of service.

Value

- `normal`— Individual service that a subscriber activates and deactivates. A normal service provisions a set of policies when activated.
- `aggregate`— Group of services that a subscriber activates and deactivates as a unit. An aggregate service contains other services (called fragments) that are managed by the aggregate service. The aggregate service is responsible for activating, deactivating, and monitoring the fragments.
- `script`— Service into which you insert or reference a script. You can use the script to manage third-party devices, provision layer 2 devices, such as DSLAMs, or set up network connections such as MPLS tunnels.
- `infrastructure`— Service that can be provisioned only once and then activated a number of times across network devices.

Default— Normal
Editing Level—Basic

`category` *category*—(Optional) The service category is not used by SRC directly. You can use it, for example, to group related services in an SRC application such as a portal. For example, in the residential portal, it is the text that appears in the set of tabs that categorize services.

Value— Text
Default— No value
Editing Level—Basic

`url` *url*—(Optional) The service URL is not used by SRC directly. You can use it in applications such as a portal to provide a link to a service provider or to the Web page that a subscriber sees after activating a service.

Value— URL
Default— No value
Editing Level—Basic

`policy-group policy-group`—(Optional) Policy group that is applied when the service is activated. The policy engine does not allow the activation of a normal service without an associated policy group.

Value— Policy group

Default— No value

Editing Level—Basic

`authentication-required`—(Optional) Determines whether activation of the service requires authentication with a username and password that are specific to this service. The service authentication-required flag is not used by the SRC software directly. You can use it, for example, to request a name and password when the service is activated by an SRC application such as a portal.

Default— Disabled

Editing Level—Basic

`authorization-plug-in [authorization-plug-in...]`—(Optional) Name of the plug-ins that authorize this service. The authorization plug-ins are called when the service is activated.

Value— Single authorization plug-in or a list of authorization plug-ins.

Default— No value

Editing Level—Basic

`tracking-plug-in [tracking-plug-in...]`—(Optional) Name of the plug-ins that track this service. The tracking plug-ins are called when a service is activated and deactivated, as well as for interim updates.

Value— Single tracking plug-in or a list of tracking plug-ins.

Default— No value

Editing Level—Basic

`session-timeout session-timeout`—(Optional) Time after which the service session is deactivated.

Changes to the session timeout take effect immediately if the new value is lower than the remaining time for a session or if you specify that no session timeout applies. Other changes apply only to services that are activated after you make the change.

The session timeout can also be controlled dynamically for each service session by a plug-in.

Value— Number of seconds in the range 0–2147483647

Default— No value

Editing Level—Basic

`idle-timeout` *idle-timeout*—(Optional) Idle time after which the SAE deactivates service. To decide whether a service is idle, the SAE collects accounting information for the service, which means that the service activation policy must specify an accounting rule. The idle timeout is the minimum time the service must be idle before it is deactivated. A service is considered idle if the volume accounting data does not change between interim updates. The actual deactivation time depends on the length of the accounting interval.

The idle timeout can also be dynamically updated per service session by an authorization plug-in.

Value— Number of seconds in the range 0–2147483647

Default— No value

Editing Level—Basic

`accounting-interim-interval` *accounting-interim-interval*—(Optional) Time between interim accounting messages for this service. The accounting interim interval can also be controlled dynamically for each service session by a plug-in.

Value— Number of seconds in the range 0–2147483647. Setting the value to 0 turns off interim accounting.

Default— No value

Editing Level—Basic

`radius-class` *radius-class*—(Optional) Default value used in the RADIUS class attribute in RADIUS accounting messages. If RADIUS authenticates the service session, the class attribute received in the RADIUS Access-Accept response from the server overrides this value. You can use this option to set the RADIUS attribute to 25.

The RADIUS class can also be dynamically for each service session by a plug-in.

Value— Text

Default— Name of the service

Editing Level—Basic

`status` (`inactive` | `active`)—(Optional) Status of the service.

Value

- `inactive`— Service does not accept new subscriptions.
- `active`— Service accepts new subscriptions.

Default— `active`

Editing Level—Basic

`activate-only`—(Optional) A service that is marked `activate only` cannot be directly deactivated. It can be deactivated indirectly through a mutex group or a session timeout.

Default— Disabled

Editing Level—Basic

`permanent`—(Optional) Specifies whether the SAE maintains permanent activation of this service for a subscriber. A service that is marked as permanent is automatically activated as soon as a subscriber subscribes to it.

Default— Disabled

Editing Level—Basic

`available`—(Optional) Specifies whether a subscriber can activate a service. To be activated, the service must be available in the currently selected scope.

Default— Enabled

Editing Level—Basic

`secret`—(Optional) Secret services are visible only to administrators who have permission to see secret information. You can use this flag to hide services from subscribers and unprivileged administrators.

Editing Level—Basic

`shared-service-name shared-service-name`—(Optional) For infrastructure services, the name of the service to be shared.

Value— Text

Default— No value

Editing Level—Basic

Required Privilege Level

service

Required Editing Level

Basic

services global service *name* admission-control

Syntax

```
services global service name admission-control {
    required-downstream-bandwidth required-downstream-bandwidth;
    required-upstream-bandwidth required-upstream-bandwidth;
    congestion-points [congestion-points...];
}
```

Hierarchy Level

```
[edit services global service name admission-control]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure upstream and downstream bandwidths for services that ACP manages.

Options

`required-downstream-bandwidth required-downstream-bandwidth`—
(Optional) Downstream bandwidth to the subscriber required for the service.

Value— Number of bps

Default— No value

Editing Level—Basic

`required-upstream-bandwidth required-upstream-bandwidth`—(Optional)
Upstream bandwidth from the subscriber required for the service.

Value— Number of bps

Default— No value

Editing Level—Basic

`congestion-points [congestion-points...]`—(Optional) Congestion points for
this service.

Value—

Default— No value
Editing Level—Basic

Required Privilege Level

service

Required Editing Level

Basic

services global service *name* aggregate fragment

Syntax

```
services global service name aggregate fragment name {
    expression expression;
    service service;
    mandatory;
    redundancy-group redundancy-group;
    subscription-required;
    substitution [substitution...];
}
```

Hierarchy Level

```
[edit services global service name aggregate fragment]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure service fragments for an aggregate service.

Options

name name— Name for service fragment. The fragment name is not stored and is re-created every time the object is read.

Value— Text

expression expression— Subscriber reference expression that identifies the remote subscriber session that will host the fragment. The remote subscriber session is an assigned IP subscriber. If the remote SAE manages the specified interface, the SAE creates an assigned IP subscriber session if necessary.

Value— Valid expressions are:

- current
- address= "A.B.C.D"
- vr= "vrName",interfaceName= "ifName"
- vr= "vrName",interfaceName= "ifName", address= "A.B.C.D"
- vr= "vrName",ifIndex= "1234"

- vr= "vrName",login_name= "user@domain"
- vr= "vrName",primary_user_name= "user@domain"
- dn= "uniqueId= ..."
- login_name= "user@domain"
- primary_user_name= "user@domain"
- ref= "rdn/rdn"

The rdn/rdn identifies the hierarchy of directory objects below the LDAP object *o= aggregateService*. The final object contains the attribute *subscriberRefExpr* to identify the subscriber session. A forward slash (/) separates the objects in the path.

You can also use a substitution or a Python expression that represents any of the literal values listed above. For a substitution or Python expression, type `< -` before the expression and type `->` after it; for example, `< -ifAlias->` . For a list and description of the fields that you can use to compose Python expressions, see *Managing Services for the SRC CLI* in the *SRC-PE Services and Policies Guide*.

Examples of valid expressions are:

- current
- address= "10.10.10.1"
- vr= "< -substitution.serviceVr-> ",interfaceName= "< -substitution.serviceInterface-> "
- dn= "uniqueId= < -ifAlias-> ,< -userDn-> "
- vr= < -["vr1","vr2"]-> ,loginName= < -["joe@abc","jane@abc"]-> .

When you include lists, fragment services are created for all combinations of values in the list. For example, `vr= < -["vr1","vr2"]-> , loginName= < -["joe@abc","jane@abc"]->` would cause four fragments to be created with the following expressions:

- vr= "vr1",loginName= "joe@abc"
- vr= "vr1",loginName= "jane@abc"
- vr= "vr2",loginName= "joe@abc"
- vr= "vr2",loginName= "jane@abc"

Default— No value

Editing Level—Basic

service service— Name of the service to be included in the aggregate service as a fragment service.

Value— Name of a service

Default— No value

Editing Level—Basic

`mandatory`—(Optional) Specifies whether the fragment service must be active for the aggregate service to become active.

Default—Mandatory

Editing Level—Basic

`redundancy-group redundancy-group`—(Optional) Group name to be applied to each fragment service that is to be part of a redundancy group. The fragment services that have the same group name provide redundancy for each other.

Value—Text

Default—No value

Editing Level—Basic

`subscription-required`—(Optional) Specifies whether a remote subscriber session must be subscribed to the fragment service for it to become active.

Enabling `subscription-required` can be used to limit the services that can be activated as fragments. Enabling this option lets you control which services can be used as fragments. For example, for an aggregate service that supports VoIP to push a policy to the caller and the callee, you can require that both subscribers sign up for VoIP services. If you disable the option, only one party needs to subscribe to the aggregate service; the policy service sessions are created automatically.

Default—Disabled

Editing Level—Basic

`substitution [substitution...]`—(Optional) List of substitutions that are used as arguments for the fragment to become active. If a parameter does not acquire a value, the associated fragment service does not become active.

Value—One or more of the following:

- `< parameter-name >` —The parameter name is defined to have the same value in the fragment service session as in the aggregate service session.
- `< parameter-name > = < substitution-expression >` —The parameter name on the left side of the equals sign is defined for the fragment service session. This parameter name is the result of the evaluation of the expression (in the aggregate service session) on the right side of the equals sign.

Default—No value

Editing Level—Basic

Required Privilege Level

service

Required Editing Level

Basic

services global service *name* parameter

Syntax

```
services global service name parameter {
    gateway-ip-address gateway-ip-address;
    service-ip-address service-ip-address;
    service-ip-mask service-ip-mask;
    service-port service-port;
    substitution [substitution...];
    session-volume-quota session-volume-quota;
}
```

Hierarchy Level

```
[edit services global service name parameter]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure parameter values for services. The policy engine substitutes parameters in policies associated with this service with the values that you specify in this parameter configuration.

Options

`gateway-ip-address gateway-ip-address`—(Optional) Actual IP address of the gateway router. This value is substituted for the policy global parameter called `gateway_ipAddress`.

Value— IP address
Default— No value
Editing Level—Basic

`service-ip-address service-ip-address`—(Optional) Actual IP address of the host(s) that provides the service. This value is substituted for the policy global parameter called `service_ipAddress`.

Value— IP address
Default— No value
Editing Level—Basic

`service-ip-mask` *service-ip-mask*—(Optional) Actual IP mask for the service. This value is substituted for the policy global parameter called `service_ipMask`.

Value— IP address

Default— No value

Editing Level—Basic

`service-port` *service-port*—(Optional) Actual port for the service. This value is substituted for the policy global parameter called `service_port`.

Value— TCP or UDP port number in the range 0–65535

Default— No value

Editing Level—Basic

`substitution` [*substitution...*]—(Optional) Actual values for other parameters. These values are substituted for the parameters that you specify.

Value— Substitution in the form `< parameter name> = < value>` . For example, `bandwidth= 1000000`.

Default— No value

Editing Level—Basic

`session-volume-quota` *session-volume-quota*—(Optional) Upstream and downstream volume quota for the service session.

The SAE does not directly use this value. It is used by applications that implement tracking plug-ins. The value of a service session can be defined at runtime either through an authorization plug-in or a call to the SAE API. If the Session Volume Quota attribute is defined in more than one place, which value is used depends on where the value is defined. The SRC software searches for the value in the following order:

1. Value set in a call to the SAE
2. Value set in an authorization plug-in
3. Value set in a service definition

Value— Volume quota in the format "downstream-quota:upstream-quota"

where

- Downstream quota is the number of bytes available for transmitting data from the network to the subscriber.
- Upstream quota is the number of bytes available for transmitting data from the subscriber to the network.

Default— No value
Editing Level—Basic

Required Privilege Level

service

Required Editing Level

Basic

services global service *name* script

Syntax

```
services global service name script {
    script-type (url | python | java-class | java-archive);
    class-name class-name;
    file file;
}
```

Hierarchy Level

```
[edit services global service name script]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure the script service.

Options

`script-type (url | python | java-class | java-archive)`— Type of script service.

Value

- `url`— URL of the script file.
- `python`— File contains Python code.
- `java-class`— File is a compiled Java class file.
- `java-archive`— File is a Java archive file (.jar).

Default— No value

Editing Level—Basic

`class-name class-name`— Name of the Java or Python class that implements the script service. The SAE instantiates this name when it starts the script service.

Value— Name of the class

Default— No value

Editing Level—Basic

file file— Location of the script service.

Value— URL or filename and path that defines the location of the script

Default— No value

Editing Level—Basic

Required Privilege Level

service

Required Editing Level

Basic

services scope

Syntax

```
services scope name {
    precedence precedence;
    substitution [substitution...];
}
```

Hierarchy Level

```
[edit services scope]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure a service scope. Service scopes let you customize which services are delivered to specific organizations or locales.

Options

name name— Name of a service scope.

Value— Text

precedence precedence—(Optional) If multiple scopes are selected for the same subscriber session, they are sorted by their precedence level.

Value— Positive integer; the lower the precedence value, the higher the ranking of the service scope.

Default— No value

Editing Level—Basic

substitution [substitution...]—(Optional) Actual values for parameters associated with this object. The policy engine substitutes parameters in policies associated with this object with the values that you specify in the substitution configuration.

Value— Substitution in the form < parameter name> = < value> . For example, bandwidth= 1000000.

Default— No value
Editing Level—Basic

Required Privilege Level

service

Required Editing Level

Basic

services scope *name* mutex-group

Syntax

```
services scope name mutex-group name {
    auto-deactivate (yes | no);
    description description;
    services [services...];
}
```

Hierarchy Level

```
[edit services scope name mutex-group]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure a mutex group. A mutex group is a collection of services that are mutually exclusive—services that the SAE cannot simultaneously activate for a particular subscriber.

Options

name name— Name of the mutex group.

Value— Text

auto-deactivate (yes | no)— Specify whether to allow activation of a service if another service is already active.

Value

- *yes*— For any one subscriber, the SAE deactivates a service in the group before activating another service in the group.
- *no*— The SAE refuses access to a requested service if the subscriber is already using another service in this group.

Default— Yes

Editing Level—Basic

`description` *description*—(Optional) Description of the mutex group.

Value— Text

Default— No value

Editing Level—Basic

`services` [*services...*]—(Optional) List of services in the mutex group.

Value— List of services

Default— No value

Editing Level—Basic

Required Privilege Level

service

Required Editing Level

Basic

services scope *name* schedule

Syntax

```
services scope name schedule name {  
    description description;  
}
```

Hierarchy Level

```
[edit services scope name schedule]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure a service schedule.

Options

name name— Name of service schedule.

Value—Text

description description—(Optional) Description of the service schedule.

Value—Text

Default— No value

Editing Level—Basic

Required Privilege Level

service

Required Editing Level

Basic

services scope *name* schedule *name* event

Syntax

```
services scope name schedule name event name ...
```

Hierarchy Level

```
[edit services scope name schedule name event]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure a scheduling event.

Options

`name name`— Name of the scheduling event.

Value—Text

Required Privilege Level

service

Required Editing Level

Basic

services scope *name* schedule *name* event *name* action

Syntax

```
services scope name schedule name event name action name {
    type (activate | deactivate | deny | deny-deactivate);
    service service;
    substitution [substitution...];
}
```

Hierarchy Level

```
[edit services scope name schedule name event name action]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure actions to perform for the scheduled event.

Options

`name name`— Arbitrary identifier for action.

Value—Text

`type (activate | deactivate | deny | deny-deactivate)`— Type of action.

Value

- `activate`— Activate service at the time specified in the entry schedule.
- `deactivate`— Deactivate service at the time specified in the entry schedule.
- `deny`— Deny new activation requests during the time specified in the entry schedule; current sessions are not affected. This value applies only to services that have an authorization plugin configured.
- `deny-deactivate`— Deny new activation requests during the time specified in the entry schedule; current sessions are deactivated at the specified time. This value applies only to

services that have an authorization plug-in configured.

Default— No value

Editing Level—Basic

`service service`— Name of service affected by this action.

Value—Text

Default— No value

Editing Level—Basic

`substitution [substitution...]`—(Optional) Substitutions to be used when activating the service. Substitutions apply only to service activations.

Value— An entry in valid substitution format. See the *SRC-PE Services and Policies Guide*.

Default— No value

Editing Level—Basic

Required Privilege Level

service

Required Editing Level

Basic

services scope *name* schedule *name* event *name* action *name* attribute

Syntax

```
services scope name schedule name event name action name attribute (sessionName |
sessionTag | sessionTimeout | downStreamBandwidth | upStreamBandwidth) {
    value;
}
```

Hierarchy Level

```
[edit services scope name schedule name event name action name attribute]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure subscription attributes. Subscription attributes apply only to service activations.

Options

Value

- *sessionName*— Name of the service session.
- *sessionTag*— Tag that can be used for accounting purposes.
- *sessionTimeout*— Session timeout to be used when the service is activated. The service session is deactivated when this timeout expires.
- *downStreamBandwidth*— Attribute used by SRC Admission Control Plug-In (SRC-ACP) to specify the rate of traffic between the network and the subscriber.
- *upStreamBandwidth*— Attribute used by SRC-ACP to specify the rate of traffic between the subscriber and the network.

value— Value of the specified subscription attribute.

Value— Depends on the specified subscription attribute

Default— No value

Editing Level—Basic

Required Privilege Level

service

Required Editing Level

Basic

services scope *name* schedule *name* event *name* except

Syntax

```
services scope name schedule name event name except name ...
```

Hierarchy Level

```
[edit services scope name schedule name event name except]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure an exclusion for the event.

Options

name name—Arbitrary identifier for exclusion rule.

Value—Text

Required Privilege Level

service

Required Editing Level

Basic

services scope *name* schedule *name* event *name* except *name* from

Syntax

```
services scope name schedule name event name except name from {
    hour hour;
    minute minute;
    day-of-month day-of-month;
    day-of-week day-of-week;
    month month;
    year year;
    time-zone time-zone;
}
```

Hierarchy Level

```
[edit services scope name schedule name event name except name from]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure the start time of the exclusion. For guidelines about entering time values, see the *SRC-PE Services and Policies Guide*.

Options

`hour hour`—(Optional) Hour of the day in the indicated month in which to schedule the event or exclusion.

Value— 0-23

Default— *

Editing Level—Basic

`minute minute`—(Optional) Minutes past the indicated hour in which to schedule the event or exclusion.

Value— 0-59

Default— *

Editing Level—Basic

`day-of-month day-of-month`—(Optional) Day of the month in which to schedule the

event or exclusion. If you specify both `day-of-month` and `day-of-week`, `day-of-month` is used.

Value— 1-31
Default— *
Editing Level—Basic

`day-of-week` *day-of-week*—(Optional) Day of the week in which to schedule the event or exclusion. If you specify both `day-of-month` and `day-of-week`, `day-of-month` is used.

Value— 0-6, with 0 representing Sunday and each subsequent number representing the next day of the week
Default— *
Editing Level—Basic

`month` *month*—(Optional) Month of the year in which to schedule the event or exclusion.

Value— 1-12
Default— *
Editing Level—Basic

`year` *year*—(Optional) Year in which to schedule the event or exclusion.

Value— Four integers that indicate the year
Default— *
Editing Level—Basic

`time-zone` *time-zone*—(Optional) Name of the time zone to use in the schedule.

Value— One of the following values:

- *—Local time zone of the SAE
- An offset to GMT in the format: GMT (+ |-) (*hh:mm* | *hh mm* | *hh*)
 - *hh*—Hour of the day in the range of 0-23
 - *mm*—Minutes past the hour in the range of 0-59

Default— *
Editing Level—Basic

Required Privilege Level

service

Required Editing Level

Basic

services scope *name* schedule *name* event *name* except *name* to

Syntax

```
services scope name schedule name event name except name to {
    hour hour;
    minute minute;
    day-of-month day-of-month;
    day-of-week day-of-week;
    month month;
    year year;
    time-zone time-zone;
}
```

Hierarchy Level

```
[edit services scope name schedule name event name except name to]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure the end time of the exclusion. For guidelines about entering time values, see the *SRC-PE Services and Policies Guide*.

These values apply only to services that have an authorization plug-in configured. If an authorization plug-in is not configured for the service associated with the schedule, these values are ignored.

Options

hour *hour*—(Optional) Hour of the day in the indicated month in which to schedule the event or exclusion.

Value— 0-23

Default— *

Editing Level—Basic

minute *minute*—(Optional) Minutes past the indicated hour in which to schedule the event or exclusion.

Value— 0-59

Default— *
Editing Level—Basic

`day-of-month` *day-of-month*—(Optional) Day of the month in which to schedule the event or exclusion. If you specify both `day-of-month` and `day-of-week`, `day-of-month` is used.

Value— 1-31
Default— *
Editing Level—Basic

`day-of-week` *day-of-week*—(Optional) Day of the week in which to schedule the event or exclusion. If you specify both `day-of-month` and `day-of-week`, `day-of-month` is used.

Value— 0-6, with 0 representing Sunday and each subsequent number representing the next day of the week
Default— *
Editing Level—Basic

`month` *month*—(Optional) Month of the year in which to schedule the event or exclusion.

Value— 1-12
Default— *
Editing Level—Basic

`year` *year*—(Optional) Year in which to schedule the event or exclusion.

Value— Four integers that indicate the year
Default— *
Editing Level—Basic

`time-zone` *time-zone*—(Optional) Name of the time zone to use in the schedule.

Value— One of the following values:

- *—Local time zone of the SAE
- An offset to GMT in the format: GMT (+ |-) (*hh:mm* | *hh mm* | *hh*)
 - *hh*—Hour of the day in the range of 0-23
 - *mm*—Minutes past the hour in the range of 0-59

Default— *

Editing Level—Basic

Required Privilege Level

service

Required Editing Level

Basic

services scope *name* schedule *name* event *name* from

Syntax

```
services scope name schedule name event name from {
    effective effective;
    hour hour;
    minute minute;
    day-of-month day-of-month;
    day-of-week day-of-week;
    month month;
    year year;
    time-zone time-zone;
}
```

Hierarchy Level

```
[edit services scope name schedule name event name from]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure the start time for the event. For guidelines about entering time values, see the *SRC-PE Services and Policies Guide*.

Options

effective effective—(Optional) Interval after the associated *from* or *to* time during which the scheduled action can be initiated by a subscriber who is logging in to a subscriber session.

Value— Number of minutes in the range 0–153722867280912

Default— *

Editing Level—Basic

hour hour—(Optional) Hour of the day in the indicated month in which to schedule the event or exclusion.

Value— 0-23

Default— *

Editing Level—Basic

`minute` *minute*—(Optional) Minutes past the indicated hour in which to schedule the event or exclusion.

Value— 0-59
Default— *
Editing Level—Basic

`day-of-month` *day-of-month*—(Optional) Day of the month in which to schedule the event or exclusion. If you specify both `day-of-month` and `day-of-week`, `day-of-month` is used.

Value— 1-31
Default— *
Editing Level—Basic

`day-of-week` *day-of-week*—(Optional) Day of the week in which to schedule the event or exclusion. If you specify both `day-of-month` and `day-of-week`, `day-of-month` is used.

Value— 0-6, with 0 representing Sunday and each subsequent number representing the next day of the week
Default— *
Editing Level—Basic

`month` *month*—(Optional) Month of the year in which to schedule the event or exclusion.

Value— 1-12
Default— *
Editing Level—Basic

`year` *year*—(Optional) Year in which to schedule the event or exclusion.

Value— Four integers that indicate the year
Default— *
Editing Level—Basic

`time-zone` *time-zone*—(Optional) Name of the time zone to use in the schedule.

Value— One of the following values:

- *—Local time zone of the SAE

- An offset to GMT in the format: GMT (+ |-) (*hh:mm* | *hh mm* | *hh*)
 - *hh*—Hour of the day in the range of 0–23
 - *mm*—Minutes past the hour in the range of 0–59

Default— *

Editing Level—Basic

Required Privilege Level

service

Required Editing Level

Basic

services scope *name* schedule *name* event *name* to

Syntax

```
services scope name schedule name event name to {
    effective effective;
    hour hour;
    minute minute;
    day-of-month day-of-month;
    day-of-week day-of-week;
    month month;
    year year;
    time-zone time-zone;
}
```

Hierarchy Level

```
[edit services scope name schedule name event name to]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure the end time for the event. For guidelines about entering time values, see the *SRC-PE Services and Policies Guide*.

These values apply only to services that have an authorization plug-in configured. If an authorization plug-in is not configured for the service associated with the schedule, these values are ignored.

Options

effective effective—(Optional) Interval after the associated *from* or *to* time during which the scheduled action can be initiated by a subscriber who is logging in to a subscriber session.

Value— Number of minutes in the range 0–153722867280912

Default— *

Editing Level—Basic

hour hour—(Optional) Hour of the day in the indicated month in which to schedule the event or exclusion.

Value— 0-23
Default— *
Editing Level—Basic

minute *minute*—(Optional) Minutes past the indicated hour in which to schedule the event or exclusion.

Value— 0-59
Default— *
Editing Level—Basic

day-of-month *day-of-month*—(Optional) Day of the month in which to schedule the event or exclusion. If you specify both *day-of-month* and *day-of-week*, *day-of-month* is used.

Value— 1-31
Default— *
Editing Level—Basic

day-of-week *day-of-week*—(Optional) Day of the week in which to schedule the event or exclusion. If you specify both *day-of-month* and *day-of-week*, *day-of-month* is used.

Value— 0-6, with 0 representing Sunday and each subsequent number representing the next day of the week
Default— *
Editing Level—Basic

month *month*—(Optional) Month of the year in which to schedule the event or exclusion.

Value— 1-12
Default— *
Editing Level—Basic

year *year*—(Optional) Year in which to schedule the event or exclusion.

Value— Four integers that indicate the year
Default— *
Editing Level—Basic

time-zone *time-zone*—(Optional) Name of the time zone to use in the schedule.

Value— One of the following values:

- *—Local time zone of the SAE
- An offset to GMT in the format: GMT (+ |-) (*hh:mm* | *hh mm* | *hh*)
 - *hh*—Hour of the day in the range of 0–23
 - *mm*—Minutes past the hour in the range of 0–59

Default— *

Editing Level—Basic

Required Privilege Level

service

Required Editing Level

Basic

services scope *name* service

Syntax

```
services scope name service name {
    description description;
    type (normal | aggregate | script | infrastructure);
    category category;
    url url;
    policy-group policy-group;
    authentication-required;
    authorization-plug-in [authorization-plug-in...];
    tracking-plug-in [tracking-plug-in...];
    session-timeout session-timeout;
    idle-timeout idle-timeout;
    accounting-interim-interval accounting-interim-interval;
    radius-class radius-class;
    status (inactive | active);
    activate-only;
    permanent;
    available;
    secret;
    shared-service-name shared-service-name;
}
```

Hierarchy Level

```
[edit services scope name service]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure a service.

Options

name *name*— Name of the service.

Value— Text

description *description*—(Optional) Description of the service.

Value— Text
Default— No value
Editing Level—Basic

`type (normal | aggregate | script | infrastructure)`— Type of service.

Value

- `normal`— Individual service that a subscriber activates and deactivates. A normal service provisions a set of policies when activated.
- `aggregate`— Group of services that a subscriber activates and deactivates as a unit. An aggregate service contains other services (called fragments) that are managed by the aggregate service. The aggregate service is responsible for activating, deactivating, and monitoring the fragments.
- `script`— Service into which you insert or reference a script. You can use the script to manage third-party devices, provision layer 2 devices, such as DSLAMs, or set up network connections such as MPLS tunnels.
- `infrastructure`— Service that can be provisioned only once and then activated a number of times across network devices.

Default— Normal
Editing Level—Basic

`category category`—(Optional) The service category is not used by SRC directly. You can use it, for example, to group related services in an SRC application such as a portal. For example, in the residential portal, it is the text that appears in the set of tabs that categorize services.

Value— Text
Default— No value
Editing Level—Basic

`url url`—(Optional) The service URL is not used by SRC directly. You can use it in applications such as a portal to provide a link to a service provider or to the Web page that a subscriber sees after activating a service.

Value— URL
Default— No value
Editing Level—Basic

`policy-group` *policy-group*—(Optional) Policy group that is applied when the service is activated. The policy engine does not allow the activation of a normal service without an associated policy group.

Value— Policy group

Default— No value

Editing Level—Basic

`authentication-required`—(Optional) Determines whether activation of the service requires authentication with a username and password that are specific to this service. The service authentication-required flag is not used by the SRC software directly. You can use it, for example, to request a name and password when the service is activated by an SRC application such as a portal.

Default— Disabled

Editing Level—Basic

`authorization-plug-in` [*authorization-plug-in...*]—(Optional) Name of the plug-ins that authorize this service. The authorization plug-ins are called when the service is activated.

Value— Single authorization plug-in or a list of authorization plug-ins.

Default— No value

Editing Level—Basic

`tracking-plug-in` [*tracking-plug-in...*]—(Optional) Name of the plug-ins that track this service. The tracking plug-ins are called when a service is activated and deactivated, as well as for interim updates.

Value— Single tracking plug-in or a list of tracking plug-ins.

Default— No value

Editing Level—Basic

`session-timeout` *session-timeout*—(Optional) Time after which the service session is deactivated.

Changes to the session timeout take effect immediately if the new value is lower than the remaining time for a session or if you specify that no session timeout applies. Other changes apply only to services that are activated after you make the change.

The session timeout can also be controlled dynamically for each service session by a plug-in.

Value— Number of seconds in the range 0–2147483647

Default— No value

Editing Level—Basic

`idle-timeout` *idle-timeout*—(Optional) Idle time after which the SAE deactivates service. To decide whether a service is idle, the SAE collects accounting information for the service, which means that the service activation policy must specify an accounting rule. The idle timeout is the minimum time the service must be idle before it is deactivated. A service is considered idle if the volume accounting data does not change between interim updates. The actual deactivation time depends on the length of the accounting interval.

The idle timeout can also be dynamically updated per service session by an authorization plug-in.

Value— Number of seconds in the range 0–2147483647

Default— No value

Editing Level—Basic

`accounting-interim-interval` *accounting-interim-interval*—(Optional) Time between interim accounting messages for this service. The accounting interim interval can also be controlled dynamically for each service session by a plug-in.

Value— Number of seconds in the range 0–2147483647. Setting the value to 0 turns off interim accounting.

Default— No value

Editing Level—Basic

`radius-class` *radius-class*—(Optional) Default value used in the RADIUS class attribute in RADIUS accounting messages. If RADIUS authenticates the service session, the class attribute received in the RADIUS Access-Accept response from the server overrides this value. You can use this option to set the RADIUS attribute to 25.

The RADIUS class can also be dynamically for each service session by a plug-in.

Value— Text

Default— Name of the service

Editing Level—Basic

`status` (`inactive` | `active`)—(Optional) Status of the service.

Value

- `inactive`— Service does not accept new subscriptions.
- `active`— Service accepts new subscriptions.

Default— `active`

Editing Level—Basic

`activate-only`—(Optional) A service that is marked `activate only` cannot be directly deactivated. It can be deactivated indirectly through a mutex group or a session timeout.

Default— Disabled

Editing Level—Basic

`permanent`—(Optional) Specifies whether the SAE maintains permanent activation of this service for a subscriber. A service that is marked as permanent is automatically activated as soon as a subscriber subscribes to it.

Default— Disabled

Editing Level—Basic

`available`—(Optional) Specifies whether a subscriber can activate a service. To be activated, the service must be available in the currently selected scope.

Default— Enabled

Editing Level—Basic

`secret`—(Optional) Secret services are visible only to administrators who have permission to see secret information. You can use this flag to hide services from subscribers and unprivileged administrators.

Editing Level—Basic

`shared-service-name` *shared-service-name*—(Optional) For infrastructure services, the name of the service to be shared.

Value— Text

Default— No value

Editing Level—Basic

Required Privilege Level

service

Required Editing Level

Basic

services scope *name* service *name* admission-control

Syntax

```
services scope name service name admission-control {
    required-downstream-bandwidth required-downstream-bandwidth;
    required-upstream-bandwidth required-upstream-bandwidth;
    congestion-points [congestion-points...];
}
```

Hierarchy Level

```
[edit services scope name service name admission-control]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure upstream and downstream bandwidths for services that ACP manages.

Options

`required-downstream-bandwidth required-downstream-bandwidth`—
(Optional) Downstream bandwidth to the subscriber required for the service.

Value— Number of bps

Default— No value

Editing Level—Basic

`required-upstream-bandwidth required-upstream-bandwidth`—(Optional)
Upstream bandwidth from the subscriber required for the service.

Value— Number of bps

Default— No value

Editing Level—Basic

`congestion-points [congestion-points...]`—(Optional) Congestion points for
this service.

Value—

Default— No value
Editing Level—Basic

Required Privilege Level

service

Required Editing Level

Basic

services scope *name* service *name* aggregate fragment

Syntax

```
services scope name service name aggregate fragment name {
    expression expression;
    service service;
    mandatory;
    redundancy-group redundancy-group;
    subscription-required;
    substitution [substitution...];
}
```

Hierarchy Level

```
[edit services scope name service name aggregate fragment]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure service fragments for an aggregate service.

Options

name name— Name for service fragment. The fragment name is not stored and is re-created every time the object is read.

Value— Text

expression expression— Subscriber reference expression that identifies the remote subscriber session that will host the fragment. The remote subscriber session is an assigned IP subscriber. If the remote SAE manages the specified interface, the SAE creates an assigned IP subscriber session if necessary.

Value— Valid expressions are:

- current
- address= "A.B.C.D"
- vr= "vrName",interfaceName= "ifName"
- vr= "vrName",interfaceName= "ifName", address= "A.B.C.D"
- vr= "vrName",ifIndex= "1234"

- vr= "vrName",login_name= "user@domain"
- vr= "vrName",primary_user_name= "user@domain"
- dn= "uniqueId= ..."
- login_name= "user@domain"
- primary_user_name= "user@domain"
- ref= "rdn/rdn"

The rdn/rdn identifies the hierarchy of directory objects below the LDAP object *o= aggregateService*. The final object contains the attribute *subscriberRefExpr* to identify the subscriber session. A forward slash (/) separates the objects in the path.

You can also use a substitution or a Python expression that represents any of the literal values listed above. For a substitution or Python expression, type `< -` before the expression and type `->` after it; for example, `< -ifAlias->` . For a list and description of the fields that you can use to compose Python expressions, see *Managing Services for the SRC CLI* in the *SRC-PE Services and Policies Guide*.

Examples of valid expressions are:

- current
- address= "10.10.10.1"
- vr= "< -substitution.serviceVr-> ",interfaceName= "< -substitution.serviceInterface-> "
- dn= "uniqueId= < -ifAlias-> ,< -userDn-> "
- vr= < -["vr1","vr2"]-> ,loginName= < -["joe@abc","jane@abc"]-> .

When you include lists, fragment services are created for all combinations of values in the list. For example, `vr= < -["vr1","vr2"]-> , loginName= < -["joe@abc","jane@abc"]->` would cause four fragments to be created with the following expressions:

- vr= "vr1",loginName= "joe@abc"
- vr= "vr1",loginName= "jane@abc"
- vr= "vr2",loginName= "joe@abc"
- vr= "vr2",loginName= "jane@abc"

Default— No value

Editing Level—Basic

service service— Name of the service to be included in the aggregate service as a fragment service.

Value— Name of a service

Default— No value

Editing Level—Basic

`mandatory`—(Optional) Specifies whether the fragment service must be active for the aggregate service to become active.

Default—Mandatory

Editing Level—Basic

`redundancy-group redundancy-group`—(Optional) Group name to be applied to each fragment service that is to be part of a redundancy group. The fragment services that have the same group name provide redundancy for each other.

Value—Text

Default—No value

Editing Level—Basic

`subscription-required`—(Optional) Specifies whether a remote subscriber session must be subscribed to the fragment service for it to become active.

Enabling `subscription-required` can be used to limit the services that can be activated as fragments. Enabling this option lets you control which services can be used as fragments. For example, for an aggregate service that supports VoIP to push a policy to the caller and the callee, you can require that both subscribers sign up for VoIP services. If you disable the option, only one party needs to subscribe to the aggregate service; the policy service sessions are created automatically.

Default—Disabled

Editing Level—Basic

`substitution [substitution...]`—(Optional) List of substitutions that are used as arguments for the fragment to become active. If a parameter does not acquire a value, the associated fragment service does not become active.

Value—One or more of the following:

- `< parameter-name >` —The parameter name is defined to have the same value in the fragment service session as in the aggregate service session.
- `< parameter-name > = < substitution-expression >` —The parameter name on the left side of the equals sign is defined for the fragment service session. This parameter name is the result of the evaluation of the expression (in the aggregate service session) on the right side of the equals sign.

Default—No value

Editing Level—Basic

Required Privilege Level

service

Required Editing Level

Basic

services scope *name* service *name* parameter

Syntax

```
services scope name service name parameter {
    gateway-ip-address gateway-ip-address;
    service-ip-address service-ip-address;
    service-ip-mask service-ip-mask;
    service-port service-port;
    substitution [substitution...];
    session-volume-quota session-volume-quota;
}
```

Hierarchy Level

```
[edit services scope name service name parameter]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure parameter values for services. The policy engine substitutes parameters in policies associated with this service with the values that you specify in this parameter configuration.

Options

`gateway-ip-address gateway-ip-address`—(Optional) Actual IP address of the gateway router. This value is substituted for the policy global parameter called `gateway_ipAddress`.

Value— IP address
Default— No value
Editing Level—Basic

`service-ip-address service-ip-address`—(Optional) Actual IP address of the host(s) that provides the service. This value is substituted for the policy global parameter called `service_ipAddress`.

Value— IP address
Default— No value
Editing Level—Basic

`service-ip-mask` *service-ip-mask*—(Optional) Actual IP mask for the service. This value is substituted for the policy global parameter called `service_ipMask`.

Value— IP address
Default— No value
Editing Level—Basic

`service-port` *service-port*—(Optional) Actual port for the service. This value is substituted for the policy global parameter called `service_port`.

Value— TCP or UDP port number in the range 0–65535
Default— No value
Editing Level—Basic

`substitution` [*substitution...*]—(Optional) Actual values for other parameters. These values are substituted for the parameters that you specify.

Value— Substitution in the form `< parameter name> = < value>` . For example, `bandwidth= 1000000`.
Default— No value
Editing Level—Basic

`session-volume-quota` *session-volume-quota*—(Optional) Upstream and downstream volume quota for the service session.

The SAE does not directly use this value. It is used by applications that implement tracking plug-ins. The value of a service session can be defined at runtime either through an authorization plug-in or a call to the SAE API. If the Session Volume Quota attribute is defined in more than one place, which value is used depends on where the value is defined. The SRC software searches for the value in the following order:

1. Value set in a call to the SAE
2. Value set in an authorization plug-in
3. Value set in a service definition

Value— Volume quota in the format "downstream-quota:upstream-quota"

where

- Downstream quota is the number of bytes available for transmitting data from the network to the subscriber.
- Upstream quota is the number of bytes available for transmitting data from the subscriber to the network.

Default— No value
Editing Level—Basic

Required Privilege Level

service

Required Editing Level

Basic

services scope *name* service *name* script

Syntax

```
services scope name service name script {
    script-type (url | python | java-class | java-archive);
    class-name class-name;
    file file;
}
```

Hierarchy Level

```
[edit services scope name service name script]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure the script service.

Options

`script-type (url | python | java-class | java-archive)`— Type of script service.

Value

- `url`— URL of the script file.
- `python`— File contains Python code.
- `java-class`— File is a compiled Java class file.
- `java-archive`— File is a Java archive file (.jar).

Default— No value

Editing Level—Basic

`class-name class-name`— Name of the Java or Python class that implements the script service. The SAE instantiates this name when it starts the script service.

Value— Name of the class

Default— No value

Editing Level—Basic

file file— Location of the script service.

Value— URL or filename and path that defines the location of the script

Default— No value

Editing Level—Basic

Required Privilege Level

service

Required Editing Level

Basic

Policy CLI

The following table summarizes the SRC command-line interface (CLI) for configuring policies. Configuration statements are listed in alphabetical order.

Policy CLI Configuration Statements
policies folder
policies global-parameters
policies group
policies group name list
policies group name list name rule
policies group name list name rule name color
policies group name list name rule name docsis-best-effort
policies group name list name rule name docsis-down-stream
policies group name list name rule name docsis-non-real-time
policies group name list name rule name docsis-parameter
policies group name list name rule name docsis-real-time
policies group name list name rule name docsis-unsolicited-grant
policies group name list name rule name docsis-unsolicited-grant-ad
policies group name list name rule name filter
policies group name list name rule name flow-spec
policies group name list name rule name forward
policies group name list name rule name forwarding-class
policies group name list name rule name gate-spec
policies group name list name rule name loss-priority
policies group name list name rule name mark
policies group name list name rule name mark name info

policies group name list name rule name nat
policies group name list name rule name nat name ip-network group-network
policies group name list name rule name nat name port
policies group name list name rule name next-hop
policies group name list name rule name next-interface
policies group name list name rule name next-rule
policies group name list name rule name policer
policies group name list name rule name policer name packet-action
policies group name list name rule name policer name packet-action name filter
policies group name list name rule name policer name packet-action name forwarding-class
policies group name list name rule name policer name packet-action name loss-priority
policies group name list name rule name policer name packet-action name parameter
policies group name list name rule name qos-attach
policies group name list name rule name qos-condition
policies group name list name rule name rate-limit
policies group name list name rule name rate-limit name committed-action filter
policies group name list name rule name rate-limit name committed-action forward
policies group name list name rule name rate-limit name committed-action mark mark-info
policies group name list name rule name rate-limit name committed-action parameter
policies group name list name rule name rate-limit name conformed-action filter
policies group name list name rule name rate-limit name conformed-action forward
policies group name list name rule name rate-limit name conformed-action mark mark-info
policies group name list name rule name rate-limit name conformed-action parameter
policies group name list name rule name rate-limit name exceed-action filter
policies group name list name rule name rate-limit name exceed-action forward

policies group name list name rule name rate-limit name exceed-action mark mark-info
policies group name list name rule name rate-limit name exceed-action parameter
policies group name list name rule name reject
policies group name list name rule name routing-instance
policies group name list name rule name scheduler-action
policies group name list name rule name scheduler-action name drop-profile
policies group name list name rule name service-class-name
policies group name list name rule name stateful-firewall
policies group name list name rule name stateful-firewall name packet-action filter
policies group name list name rule name stateful-firewall name packet-action forward
policies group name list name rule name stateful-firewall name packet-action parameter
policies group name list name rule name stateful-firewall name packet-action reject
policies group name list name rule name traffic-class
policies group name list name rule name traffic-condition
policies group name list name rule name traffic-condition name application-protocol-condition
policies group name list name rule name traffic-condition name application-protocol-condition name proto-attr
policies group name list name rule name traffic-condition name application-protocol-condition name proto-attr destination-port port
policies group name list name rule name traffic-condition name application-protocol-condition name proto-attr source-port port
policies group name list name rule name traffic-condition name destination-network group-network
policies group name list name rule name traffic-condition name destination-network network
policies group name list name rule name traffic-condition name icmp-condition
policies group name list name rule name traffic-condition name igmp-condition
policies group name list name rule name traffic-condition name ipsec-condition
policies group name list name rule name traffic-condition name parameter-protocol-condition

policies group name list name rule name traffic-condition name parameter-protocol-condition proto-attr
policies group name list name rule name traffic-condition name parameter-protocol-condition proto-attr destination-port port
policies group name list name rule name traffic-condition name parameter-protocol-condition proto-attr source-port port
policies group name list name rule name traffic-condition name protocol-condition
policies group name list name rule name traffic-condition name protocol-port-condition
policies group name list name rule name traffic-condition name protocol-port-condition destination-port port
policies group name list name rule name traffic-condition name protocol-port-condition source-port port
policies group name list name rule name traffic-condition name source-network group-network
policies group name list name rule name traffic-condition name source-network network
policies group name list name rule name traffic-condition name tcp-condition
policies group name list name rule name traffic-condition name tcp-condition destination-port port
policies group name list name rule name traffic-condition name tcp-condition source-port port
policies group name list name rule name traffic-condition name tos
policies group name list name rule name traffic-condition name traffic-match-condition
policies group name list name rule name traffic-mirror
policies group name list name rule name traffic-shape
policies group name list name rule name user-packet-class
policies group name local-parameters

policies folder

Syntax

```
policies folder name {
    description description;
}
```

Hierarchy Level

```
[edit policies folder]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure a policy folder, which is a collection of policies.

Options

name name— Name for a policy folder, which is a collection of policy folders or groups.

Value— Text

description description—(Optional) Description of the object that you are configuring.

Value— Text

Default— No value

Editing Level—Basic

Required Privilege Level

service

Required Editing Level

Basic

policies global-parameters

Syntax

```
policies global-parameters name {
    description description;
    default-value default-value;
    type type;
}
```

Hierarchy Level

```
[edit policies global-parameters]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Defines a global parameter. A global parameter is available for use in any policy. With global parameters, you can define parameters once and then reuse them in many policies. Typically, you would use global parameters if the parameter does not need to change often. If parameters require changes, use local parameters.

Options

`name name`— Name of the parameter

Value— Text

`description description`—(Optional) Description of the object that you are configuring.

Value— Text

Default— No value

Editing Level—Basic

`default-value default-value`—(Optional) Value that the policy engine uses if no other values are provided during the parameter value acquisition process. If other values are provided to the policy engine but problems are encountered, the default value for the parameter is not used. The policy engine generates an error message.

Value— Valid value for the parameter type. See the policy documentation in the *SRC-PE Services and Policies Guide* for valid values for each parameter type.

Default— No value

Editing Level—Basic

`type type`—(Optional) Type of attribute for which you can use the parameter. The parameter type determines where you can use the parameter.

Value— See the policy documentation in the *SRC-PE Services and Policies Guide* for a list of parameter types, where each type of parameter is used, and what each parameter is used to specify.

Default— No value

Editing Level—Basic

Required Privilege Level

service

Required Editing Level

Basic

policies group

Syntax

```
policies group name {  
    description description;  
}
```

Hierarchy Level

```
[edit policies group]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure a policy group, which is a collection of policy lists.

Options

name name— Name for a collection of policy lists.

Value— Text

description description—(Optional) Description of the object that you are configuring.

Value— Text

Default— No value

Editing Level—Basic

Required Privilege Level

service

Required Editing Level

Basic

policies group *name* list

Syntax

```
policies group name list name {
    role (junos | junose-ipv4 | junose-ipv6 | pcmm);
    applicability (input | output | both);
    description description;
}
```

Hierarchy Level

```
[edit policies group name list]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure a policy list that holds a collection of policy rules.

Options

`name name`— Name for a collection of policy rules.

Value— Text

`role (junos | junose-ipv4 | junose-ipv6 | pcmm)`— Platform for which the policy list is created. The selection that you make controls the type of policy rules that you can add to the policy list. You must configure the role before you can configure the policy rule.

Value

- `junos`— JUNOS routing platform
- `junose-ipv4`— JUNOSe router that is running IPv4
- `junose-ipv6`— JUNOSe router that is running IPv6
- `pcmm`— PCMM platform

Default— No value

Editing Level— Basic

applicability (*input* | *output* | *both*)— Indicates where the policy is applied on the router or, for PCMM policies, indicates whether the policy applies to the upstream or downstream channel.

For JUNOS routing platforms, *applicability* determines the types of policy rules that you can create:

- JUNOS ASP—Applicability must be both.
- JUNOS FILTER—Applicability must be input or output.
- JUNOS POLICER—Applicability must be input or output.
- JUNOS SCHEDULER—Applicability must be both.
- JUNOS SHAPING—Applicability must be both.

Value

- *input*— Policy is applied to the input (ingress) side of the router interface. For PCMM policies, the policy is provisioned on upstream service flows (from the cable modem to the CMTS device).
- *output*— Policy is applied to the output (egress) side of the router interface. For PCMM policies, the policy is provisioned on the downstream channel (from the CMTS device to the cable modem).
- *both*— Policy is applied to both the input (ingress) and output (egress) side of the interface, or it is attached implicitly to the interface without indicating direction. The *both* value is not valid for PCMM or JUNOSe policies.

In the case of JUNOS ASP policy rules, the policy is attached to both sides of the interface; for JUNOS scheduler policy rules, the policy is attached implicitly to the interface without indicating direction.

Editing Level—Basic

description *description*—(Optional) Description of the object that you are configuring.

Value— Text

Default— No value

Editing Level—Basic

Required Privilege Level

service

Required Editing Level

Basic

policies group *name* list *name* rule

Syntax

```
policies group name list name rule name {
    type type;
    precedence precedence;
    accounting;
    description description;
}
```

Hierarchy Level

```
[edit policies group name list name rule]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure a policy rule, which is a collection of conditions and actions.

Options

name name— Name for a policy rule, which is a collection of conditions and actions.

Value— Text

type type— Policy rule type, which is based on the applicability and the role of the policy.

Value— The type of policy rule that you can create depends on the role and applicability of the policy list in which you create the policy rule.

- For JUNOSe policy lists, there is only one type—junose.
- For PCMM policy lists, there is only one type—pcmm.
- For JUNOS policy lists, you can create the following policy rule types:
 - JUNOS ASP—Applicability of policy list must be both input and output.
 - JUNOS FILTER—Applicability of policy list must be input or output.
 - JUNOS POLICER—Applicability of policy list must be

- input or output.
- JUNOS SCHEDULER—Applicability of policy list must be both.
- JUNOS SHAPING—Applicability of policy list must be both.

Default— No value

Editing Level—Basic

precedence precedence—(Optional) Order in which the policy manager applies policy rules. Rules are evaluated from lowest to highest precedence value. Precedence has meaning only if two rules have different classifiers and if those classifiers overlap. If this is the case and a packet is received that satisfies both classifiers, then only the action of the rule with the lower precedence value is performed.

- For JUNOSe policies, rules with equal precedence are evaluated in the order of creation.
- For JUNOS policies, rules with equal precedence are evaluated in random order. Precedence is not a factor for JUNOS SCHEDULER and JUNOS POLICER policy rules.

Value— One of the following:

- For JUNOS and JUNOSe policies, integer in the range 0–32767
- For PCMM policies, integer in the range 64–191
- Parameter of type *prPrecedence*

Default— 100

Editing Level—Basic

accounting—(Optional) Specifies whether accounting data is collected for the actions specified in the rule.

If you specify that accounting data is collected, the SAE begins collecting accounting information when a service that uses the policy rule is activated. When the service is deactivated, the SAE sends the accounting records to the RADIUS accounting server or to a plug-in.

When you specify multiple actions for accounting, the SAE adds the accounting data for individual actions together to obtain a summary accounting record for that interface direction.

Accounting is not available for all actions. For example, the NAT action does not provide accounting.

Value— One of the following:

- true—Accounting data is collected.
- false—Accounting data is not collected.

Default— false

Editing Level—Basic

description description—(Optional) Description of the object that you are configuring.

Value— Text

Default— No value

Editing Level—Basic

Required Privilege Level

service

Required Editing Level

Basic

policies group *name* list *name* rule *name* color

Syntax

```
policies group name list name rule name color name {
    color color;
    description description;
}
```

Hierarchy Level

```
[edit policies group name list name rule name color]
```

Release Information

Statement introduced in SRC Release 2.0.0

Description

Configure a color action. Use this action to specify the color that is applied to a packet when it passes through the router. You can configure color actions for JUNOSe policy rules.

Options

`name name`— Name for the color action.

Value— Text

`color color`—(Optional) Color that is applied to a packet when it passes through the router.

Value— One of the following:

- Integer in the range 1–3
 - 1—green
 - 2—yellow
 - 3—red
- Parameter of type color

Default— No value

Editing Level—Basic

`description` *description*—(Optional) Description of the object that you are configuring.

Value—Text

Default— No value

Editing Level—Basic

Required Privilege Level

service

Required Editing Level

Basic

policies group *name* list *name* rule *name* docsis-best-effort

Syntax

```
policies group name list name rule name docsis-best-effort name {
    traffic-priority traffic-priority;
    request-transmission-policy request-transmission-policy;
    maximum-sustained-rate maximum-sustained-rate;
    maximum-traffic-burst maximum-traffic-burst;
    minimum-reserved-rate minimum-reserved-rate;
    assumed-minimum-res-packet-size assumed-minimum-res-packet-size;
    description description;
}
```

Hierarchy Level

```
[edit policies group name list name rule name docsis-best-effort]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure a DOCSIS action that is set to best-effort service flow scheduling type. DOCSIS actions are for PCMM policy rules.

Options

name *name*— Name of a DOCSIS action that is set to best-effort service flow scheduling type.

Value— Text

traffic-priority *traffic-priority*—(Optional) Priority for the service flow. If two traffic flows are identical in all QoS parameters except priority, the higher-priority service flow is given preference.

Value— One of the following:

- Number in the range 0–7, where 0 is the lowest priority and 7 is the highest priority
- Parameter of type trafficPriority

Default— No value

Editing Level—Basic

`request-transmission-policy request-transmission-policy`—(Optional)

Interval usage code that the cable modem uses for upstream transmission requests and packet transmissions for this service flow. Specifies whether requests can be piggybacked with data. Also, for data packets transmitted on this service flow, specifies whether packets can be concatenated, fragmented, or have their payload headers suppressed. For UGS flows, this option also specifies how to treat packets that do not fit into the UGS grant.

Value— One of the following:

- 4-byte bit field; the valid range is 0-511
- Parameter of type requestTransmissionPolicy

Default— No value

Editing Level—Basic

`maximum-sustained-rate maximum-sustained-rate`—(Optional) Maximum sustained rate at which traffic can operate over the service flow.

Value— One of the following:

- Predefined global parameter `interface_speed`, which is the speed of the subscriber's DOCSIS interface
- Number of bytes in the range 0-4294967295
- Numeric expression
- Parameter of type rate

Default— No value

Editing Level—Basic

`maximum-traffic-burst maximum-traffic-burst`—(Optional) Maximum burst size for the service flow. This parameter has no effect unless you configure a nonzero value for the maximum sustained rate.

Value— One of the following:

- Predefined global parameter `interface_speed`, which is the speed of the subscriber's DOCSIS interface
- Number of bytes in the range 1522-4294967295
- Numeric expression
- Parameter of type burst

Default— No value
Editing Level—Basic

`minimum-reserved-rate` *minimum-reserved-rate*—(Optional) Guaranteed minimum rate that is reserved for the service flow.

Value— One of the following:

- Predefined global parameter `interface_speed`, which is the speed of the subscriber's DOCSIS interface
- Number of bits per second in the range 0–4294967295; a value of 0 means that no bandwidth is reserved for the service flow
- Numeric expression
- Parameter of type `rate`

Default— No value
Editing Level—Basic

`assumed-minimum-res-packet-size` *assumed-minimum-res-packet-size*—(Optional) Assumed minimum packet size for which the minimum reserved traffic rate is provided. If a packet is smaller than the assumed minimum packet size, the software treats the packet as if its size is equal to the value specified in this option.

Value— One of the following:

- Number of bytes in the range 0–65535
- Numeric expression
- Parameter of type `packetLength`

Default— No value
Editing Level—Basic

`description` *description*—(Optional) Description of the object that you are configuring.

Value—Text
Default— No value
Editing Level—Basic

Required Privilege Level

service

Required Editing Level

Basic

policies group *name* list *name* rule *name* docsis-down-stream

Syntax

```
policies group name list name rule name docsis-down-stream name {
    traffic-priority traffic-priority;
    maximum-latency maximum-latency;
    maximum-sustained-rate maximum-sustained-rate;
    maximum-traffic-burst maximum-traffic-burst;
    minimum-reserved-rate minimum-reserved-rate;
    assumed-minimum-res-packet-size assumed-minimum-res-packet-size;
    description description;
}
```

Hierarchy Level

```
[edit policies group name list name rule name docsis-down-stream]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure a DOCSIS action that is set to downstream service flow scheduling type. DOCSIS actions are for PCMM policy rules.

Options

name *name*— Name of a DOCSIS action that is set to downstream service flow scheduling type.

Value— Text

traffic-priority *traffic-priority*—(Optional) Priority for the service flow. If two traffic flows are identical in all QoS parameters except priority, the higher-priority service flow is given preference.

Value— One of the following:

- Number in the range 0–7, where 0 is the lowest priority and 7 is the highest priority
- Parameter of type trafficPriority

Default— No value

Editing Level—Basic

`maximum-latency` *maximum-latency*—(Optional) Maximum latency for downstream service flows. It is the maximum latency for a packet that passes through the CMTS device, from the time that the CMTS device's network side interface receives the packet until the CMTS device forwards the packet on its radio frequency (RF) interface.

Value— One of the following:

- Number of microseconds in the range 0–4294967295
- Numeric expression
- Parameter of type maxLatency

Default— No value

Editing Level—Basic

`maximum-sustained-rate` *maximum-sustained-rate*—(Optional) Maximum sustained rate at which traffic can operate over the service flow.

Value— One of the following:

- Predefined global parameter `interface_speed`, which is the speed of the subscriber's DOCSIS interface
- Number of bytes in the range 0–4294967295
- Numeric expression
- Parameter of type rate

Default— No value

Editing Level—Basic

`maximum-traffic-burst` *maximum-traffic-burst*—(Optional) Maximum burst size for the service flow. This parameter has no effect unless you configure a nonzero value for the maximum sustained rate.

Value— One of the following:

- Predefined global parameter `interface_speed`, which is the speed of the subscriber's DOCSIS interface
- Number of bytes in the range 1522–4294967295
- Numeric expression
- Parameter of type burst

Default— No value
Editing Level—Basic

`minimum-reserved-rate` *minimum-reserved-rate*—(Optional) Guaranteed minimum rate that is reserved for the service flow.

Value— One of the following:

- Predefined global parameter `interface_speed`, which is the speed of the subscriber's DOCSIS interface
- Number of bits per second in the range 0–4294967295; a value of 0 means that no bandwidth is reserved for the service flow
- Numeric expression
- Parameter of type `rate`

Default— No value
Editing Level—Basic

`assumed-minimum-res-packet-size` *assumed-minimum-res-packet-size*—(Optional) Assumed minimum packet size for which the minimum reserved traffic rate is provided. If a packet is smaller than the assumed minimum packet size, the software treats the packet as if its size is equal to the value specified in this option.

Value— One of the following:

- Number of bytes in the range 0–65535
- Numeric expression
- Parameter of type `packetLength`

Default— No value
Editing Level—Basic

`description` *description*—(Optional) Description of the object that you are configuring.

Value—Text
Default— No value
Editing Level—Basic

Required Privilege Level

service

Required Editing Level

Basic

policies group *name* list *name* rule *name* docsis-non-real-time

Syntax

```
policies group name list name rule name docsis-non-real-time name {
    traffic-priority traffic-priority;
    request-transmission-policy request-transmission-policy;
    maximum-sustained-rate maximum-sustained-rate;
    maximum-traffic-burst maximum-traffic-burst;
    minimum-reserved-rate minimum-reserved-rate;
    assumed-minimum-res-packet-size assumed-minimum-res-packet-size;
    nominal-polling-interval nominal-polling-interval;
    description description;
}
```

Hierarchy Level

```
[edit policies group name list name rule name docsis-non-real-time]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure a DOCSIS action that is set to non-real-time service flow scheduling type. DOCSIS actions are for PCMM policy rules.

Options

name *name*— Name of a DOCSIS action that is set to non-real-time service flow scheduling type.

Value— Text

traffic-priority *traffic-priority*—(Optional) Priority for the service flow. If two traffic flows are identical in all QoS parameters except priority, the higher-priority service flow is given preference.

Value— One of the following:

- Number in the range 0–7, where 0 is the lowest priority and 7 is the highest priority

- Parameter of type trafficPriority

Default— No value

Editing Level—Basic

`request-transmission-policy request-transmission-policy`—(Optional) Interval usage code that the cable modem uses for upstream transmission requests and packet transmissions for this service flow. Specifies whether requests can be piggybacked with data. Also, for data packets transmitted on this service flow, specifies whether packets can be concatenated, fragmented, or have their payload headers suppressed. For UGS flows, this option also specifies how to treat packets that do not fit into the UGS grant.

Value— One of the following:

- 4-byte bit field; the valid range is 0–511
- Parameter of type requestTransmissionPolicy

Default— No value

Editing Level—Basic

`maximum-sustained-rate maximum-sustained-rate`—(Optional) Maximum sustained rate at which traffic can operate over the service flow.

Value— One of the following:

- Predefined global parameter `interface_speed`, which is the speed of the subscriber's DOCSIS interface
- Number of bytes in the range 0–4294967295
- Numeric expression
- Parameter of type rate

Default— No value

Editing Level—Basic

`maximum-traffic-burst maximum-traffic-burst`—(Optional) Maximum burst size for the service flow. This parameter has no effect unless you configure a nonzero value for the maximum sustained rate.

Value— One of the following:

- Predefined global parameter `interface_speed`, which is the speed of the subscriber's DOCSIS interface
- Number of bytes in the range 1522–4294967295

- Numeric expression
- Parameter of type burst

Default— No value

Editing Level—Basic

`minimum-reserved-rate` *minimum-reserved-rate*—(Optional) Guaranteed minimum rate that is reserved for the service flow.

Value— One of the following:

- Predefined global parameter `interface_speed`, which is the speed of the subscriber's DOCSIS interface
- Number of bits per second in the range 0–4294967295; a value of 0 means that no bandwidth is reserved for the service flow
- Numeric expression
- Parameter of type rate

Default— No value

Editing Level—Basic

`assumed-minimum-res-packet-size` *assumed-minimum-res-packet-size*—(Optional) Assumed minimum packet size for which the minimum reserved traffic rate is provided. If a packet is smaller than the assumed minimum packet size, the software treats the packet as if its size is equal to the value specified in this option.

Value— One of the following:

- Number of bytes in the range 0–65535
- Numeric expression
- Parameter of type `packetLength`

Default— No value

Editing Level—Basic

`nominal-polling-interval` *nominal-polling-interval*—(Optional) Nominal interval between successive unicast request opportunities for this service flow.

Value— One of the following:

- Number of microseconds in the range 0–4294967295
- Numeric expression
- Parameter of type interval

Default— No value

Editing Level—Basic

`description` *description*—(Optional) Description of the object that you are configuring.

Value—Text

Default— No value

Editing Level—Basic

Required Privilege Level

service

Required Editing Level

Basic

policies group *name* list *name* rule *name* docsis-parameter

Syntax

```
policies group name list name rule name docsis-parameter name {
    service-flow-type service-flow-type;
    traffic-priority traffic-priority;
    request-transmission-policy request-transmission-policy;
    maximum-sustained-rate maximum-sustained-rate;
    maximum-traffic-burst maximum-traffic-burst;
    minimum-reserved-rate minimum-reserved-rate;
    assumed-minimum-res-packet-size assumed-minimum-res-packet-size;
    maximum-latency maximum-latency;
    nominal-polling-interval nominal-polling-interval;
    tolerated-poll-jitter tolerated-poll-jitter;
    grant-size grant-size;
    grants-per-interval grants-per-interval;
    tolerated-grant-jitter tolerated-grant-jitter;
    nominal-grant-interval nominal-grant-interval;
    description description;
}
```

Hierarchy Level

```
[edit policies group name list name rule name docsis-parameter]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure a DOCSIS action with the service flow scheduling type set to a parameter. The parameter is a trafficProfileType parameter.

Options

name name— Name of a DOCSIS action that is set to the trafficProfileType parameter as the service flow scheduling type.

Value— Text

service-flow-type service-flow-type— Parameter that is used to determine the

service flow scheduling type.

Value— Parameter of type `trafficProfileType`. You must enter a parameter that has been created and has been committed.

Default— No value

Editing Level—Basic

`traffic-priority traffic-priority`—(Optional) Priority for the service flow. If two traffic flows are identical in all QoS parameters except priority, the higher-priority service flow is given preference.

Value— One of the following:

- Number in the range 0–7, where 0 is the lowest priority and 7 is the highest priority
- Parameter of type `trafficPriority`

Default— No value

Editing Level—Basic

`request-transmission-policy request-transmission-policy`—(Optional) Interval usage code that the cable modem uses for upstream transmission requests and packet transmissions for this service flow. Specifies whether requests can be piggybacked with data. Also, for data packets transmitted on this service flow, specifies whether packets can be concatenated, fragmented, or have their payload headers suppressed. For UGS flows, this option also specifies how to treat packets that do not fit into the UGS grant.

Value— One of the following:

- 4-byte bit field; the valid range is 0–511
- Parameter of type `requestTransmissionPolicy`

Default— No value

Editing Level—Basic

`maximum-sustained-rate maximum-sustained-rate`—(Optional) Maximum sustained rate at which traffic can operate over the service flow.

Value— One of the following:

- Predefined global parameter `interface_speed`, which is the speed of the subscriber's DOCSIS interface
- Number of bytes in the range 0–4294967295
- Numeric expression

- Parameter of type rate

Default— No value

Editing Level—Basic

`maximum-traffic-burst` *maximum-traffic-burst*—(Optional) Maximum burst size for the service flow. This parameter has no effect unless you configure a nonzero value for the maximum sustained rate.

Value— One of the following:

- Predefined global parameter `interface_speed`, which is the speed of the subscriber's DOCSIS interface
- Number of bytes in the range 1522–4294967295
- Numeric expression
- Parameter of type burst

Default— No value

Editing Level—Basic

`minimum-reserved-rate` *minimum-reserved-rate*—(Optional) Guaranteed minimum rate that is reserved for the service flow.

Value— One of the following:

- Predefined global parameter `interface_speed`, which is the speed of the subscriber's DOCSIS interface
- Number of bits per second in the range 0–4294967295; a value of 0 means that no bandwidth is reserved for the service flow
- Numeric expression
- Parameter of type rate

Default— No value

Editing Level—Basic

`assumed-minimum-res-packet-size` *assumed-minimum-res-packet-size*—(Optional) Assumed minimum packet size for which the minimum reserved traffic rate is provided. If a packet is smaller than the assumed minimum packet size, the software treats the packet as if its size is equal to the value specified in this option.

Value— One of the following:

- Number of bytes in the range 0–65535

- Numeric expression
- Parameter of type packetLength

Default— No value

Editing Level—Basic

`maximum-latency` *maximum-latency*—(Optional) Maximum latency for downstream service flows. It is the maximum latency for a packet that passes through the CMTS device, from the time that the CMTS device's network side interface receives the packet until the CMTS device forwards the packet on its radio frequency (RF) interface.

Value— One of the following:

- Number of microseconds in the range 0–4294967295
- Numeric expression
- Parameter of type maxLatency

Default— No value

Editing Level—Basic

`nominal-polling-interval` *nominal-polling-interval*—(Optional) Nominal interval between successive unicast request opportunities for this service flow.

Value— One of the following:

- Number of microseconds in the range 0–4294967295
- Numeric expression
- Parameter of type interval

Default— No value

Editing Level—Basic

`tolerated-poll-jitter` *tolerated-poll-jitter*—(Optional) Maximum amount of time that unicast request intervals can be delayed beyond the nominal polling interval. Delaying requests allows the service flow scheduler to fit as much data as possible in an upstream packet, thereby reducing fragmentation.

Value— One of the following:

- Number of microseconds in the range 0–4294967295
- Numeric expression
- Parameter of type jitter

Default— No value

Editing Level—Basic

`grant-size` *grant-size*—(Optional) Size of the individual data grants provided to the service flow.

Value— One of the following:

- Number of bytes in the range 0–65535
- Numeric expression
- Parameter of type `grantSize`

Default— No value

Editing Level—Basic

`grants-per-interval` *grants-per-interval*—(Optional) Actual number of data grants given to the service flow during each nominal grant interval.

Value— One of the following:

- Integer in the range 0–127
- Numeric expression
- Parameter of type `interval`

Default— No value

Editing Level—Basic

`tolerated-grant-jitter` *tolerated-grant-jitter*—(Optional) Maximum amount of time that the transmission opportunities can be delayed beyond the nominal grant interval. A jitter buffer can stop latency, but an improperly sized buffer can cause additional latency.

Value— One of the following:

- Number of microseconds in the range 0–4294967295
- Numeric expression
- Parameter of type `jitter`

Default— No value

Editing Level—Basic

`nominal-grant-interval` *nominal-grant-interval*—(Optional) Nominal interval between successive unsolicited data grant opportunities for this service flow.

Value— One of the following:

- Number of microseconds in the range 0–4294967295
- Numeric expression
- Parameter of type interval

Default— No value

Editing Level—Basic

`description` *description*—(Optional) Description of the object that you are configuring.

Value—Text

Default— No value

Editing Level—Basic

Required Privilege Level

service

Required Editing Level

Basic

policies group *name* list *name* rule *name* docsis-real-time

Syntax

```
policies group name list name rule name docsis-real-time name {
    request-transmission-policy request-transmission-policy;
    maximum-sustained-rate maximum-sustained-rate;
    maximum-traffic-burst maximum-traffic-burst;
    minimum-reserved-rate minimum-reserved-rate;
    assumed-minimum-res-packet-size assumed-minimum-res-packet-size;
    nominal-polling-interval nominal-polling-interval;
    tolerated-poll-jitter tolerated-poll-jitter;
    description description;
}
```

Hierarchy Level

```
[edit policies group name list name rule name docsis-real-time]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure a DOCSIS action that is set to real-time service flow scheduling type. DOCSIS actions are for PCMM policy rules.

Options

name *name*— Name of a DOCSIS action that is set to real-time service flow scheduling type.

Value— Text

request-transmission-policy *request-transmission-policy*—(Optional)
Interval usage code that the cable modem uses for upstream transmission requests and packet transmissions for this service flow. Specifies whether requests can be piggybacked with data. Also, for data packets transmitted on this service flow, specifies whether packets can be concatenated, fragmented, or have their payload headers suppressed. For UGS flows, this option also specifies how to treat packets that do not fit into the UGS grant.

Value— One of the following:

- 4-byte bit field; the valid range is 0–511
- Parameter of type requestTransmissionPolicy

Default— No value

Editing Level—Basic

`maximum-sustained-rate` *maximum-sustained-rate*—(Optional) Maximum sustained rate at which traffic can operate over the service flow.

Value— One of the following:

- Predefined global parameter `interface_speed`, which is the speed of the subscriber's DOCSIS interface
- Number of bytes in the range 0–4294967295
- Numeric expression
- Parameter of type rate

Default— No value

Editing Level—Basic

`maximum-traffic-burst` *maximum-traffic-burst*—(Optional) Maximum burst size for the service flow. This parameter has no effect unless you configure a nonzero value for the maximum sustained rate.

Value— One of the following:

- Predefined global parameter `interface_speed`, which is the speed of the subscriber's DOCSIS interface
- Number of bytes in the range 1522–4294967295
- Numeric expression
- Parameter of type burst

Default— No value

Editing Level—Basic

`minimum-reserved-rate` *minimum-reserved-rate*—(Optional) Guaranteed minimum rate that is reserved for the service flow.

Value— One of the following:

- Predefined global parameter `interface_speed`, which is the speed of the subscriber's DOCSIS interface
- Number of bits per second in the range 0–4294967295; a value

- of 0 means that no bandwidth is reserved for the service flow
- Numeric expression
- Parameter of type rate

Default— No value

Editing Level—Basic

`assumed-minimum-res-packet-size` *assumed-minimum-res-packet-size*— (Optional) Assumed minimum packet size for which the minimum reserved traffic rate is provided. If a packet is smaller than the assumed minimum packet size, the software treats the packet as if its size is equal to the value specified in this option.

Value— One of the following:

- Number of bytes in the range 0-65535
- Numeric expression
- Parameter of type packetLength

Default— No value

Editing Level—Basic

`nominal-polling-interval` *nominal-polling-interval*—(Optional) Nominal interval between successive unicast request opportunities for this service flow.

Value— One of the following:

- Number of microseconds in the range 0-4294967295
- Numeric expression
- Parameter of type interval

Default— No value

Editing Level—Basic

`tolerated-poll-jitter` *tolerated-poll-jitter*—(Optional) Maximum amount of time that unicast request intervals can be delayed beyond the nominal polling interval. Delaying requests allows the service flow scheduler to fit as much data as possible in an upstream packet, thereby reducing fragmentation.

Value— One of the following:

- Number of microseconds in the range 0-4294967295
- Numeric expression
- Parameter of type jitter

Default— No value

Editing Level—Basic

`description` *description*—(Optional) Description of the object that you are configuring.

Value—Text

Default— No value

Editing Level—Basic

Required Privilege Level

service

Required Editing Level

Basic

policies group *name* list *name* rule *name* docsis-unsolicited-grant

Syntax

```
policies group name list name rule name docsis-unsolicited-grant name {
    request-transmission-policy request-transmission-policy;
    grant-size grant-size;
    grants-per-interval grants-per-interval;
    tolerated-grant-jitter tolerated-grant-jitter;
    nominal-grant-interval nominal-grant-interval;
    description description;
}
```

Hierarchy Level

```
[edit policies group name list name rule name docsis-unsolicited-grant]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure a DOCSIS action that is set to unsolicited grant (UGS) service flow scheduling type. DOCSIS actions are for PCMM policy rules.

Options

`name name`— Name of a DOCSIS action that is set to UGS service flow scheduling type.

Value— Text

`request-transmission-policy request-transmission-policy`—(Optional)
Interval usage code that the cable modem uses for upstream transmission requests and packet transmissions for this service flow. Specifies whether requests can be piggybacked with data. Also, for data packets transmitted on this service flow, specifies whether packets can be concatenated, fragmented, or have their payload headers suppressed. For UGS flows, this option also specifies how to treat packets that do not fit into the UGS grant.

Value— One of the following:

- 4-byte bit field; the valid range is 0–511

- Parameter of type requestTransmissionPolicy

Default— No value

Editing Level—Basic

`grant-size` *grant-size*—(Optional) Size of the individual data grants provided to the service flow.

Value— One of the following:

- Number of bytes in the range 0–65535
- Numeric expression
- Parameter of type grantSize

Default— No value

Editing Level—Basic

`grants-per-interval` *grants-per-interval*—(Optional) Actual number of data grants given to the service flow during each nominal grant interval.

Value— One of the following:

- Integer in the range 0–127
- Numeric expression
- Parameter of type interval

Default— No value

Editing Level—Basic

`tolerated-grant-jitter` *tolerated-grant-jitter*—(Optional) Maximum amount of time that the transmission opportunities can be delayed beyond the nominal grant interval. A jitter buffer can stop latency, but an improperly sized buffer can cause additional latency.

Value— One of the following:

- Number of microseconds in the range 0–4294967295
- Numeric expression
- Parameter of type jitter

Default— No value

Editing Level—Basic

`nominal-grant-interval` *nominal-grant-interval*—(Optional) Nominal interval between successive unsolicited data grant opportunities for this service flow.

Value— One of the following:

- Number of microseconds in the range 0–4294967295
- Numeric expression
- Parameter of type `interval`

Default— No value

Editing Level—Basic

`description` *description*—(Optional) Description of the object that you are configuring.

Value—Text

Default— No value

Editing Level—Basic

Required Privilege Level

service

Required Editing Level

Basic

policies group *name* list *name* rule *name* docsis-unsolicited-grant-ad

Syntax

```
policies group name list name rule name docsis-unsolicited-grant-ad name {
    request-transmission-policy request-transmission-policy;
    nominal-polling-interval nominal-polling-interval;
    grant-size grant-size;
    grants-per-interval grants-per-interval;
    tolerated-grant-jitter tolerated-grant-jitter;
    nominal-grant-interval nominal-grant-interval;
    description description;
}
```

Hierarchy Level

```
[edit policies group name list name rule name docsis-unsolicited-grant-ad]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure a DOCSIS action that is set to unsolicited grant service with activity detection (UGS-AD) service flow scheduling type. DOCSIS actions are for PCMM policy rules.

Options

name name— Name of a DOCSIS action that is set to unsolicited grant service with activity detection (UGS-AD) service flow scheduling type.

Value— Text

request-transmission-policy request-transmission-policy—(Optional)
Interval usage code that the cable modem uses for upstream transmission requests and packet transmissions for this service flow. Specifies whether requests can be piggybacked with data. Also, for data packets transmitted on this service flow, specifies whether packets can be concatenated, fragmented, or have their payload headers suppressed. For UGS flows, this option also specifies how to treat packets that do not fit into the UGS grant.

Value— One of the following:

- 4-byte bit field; the valid range is 0–511
- Parameter of type requestTransmissionPolicy

Default— No value

Editing Level—Basic

`nominal-polling-interval` *nominal-polling-interval*—(Optional) Nominal interval between successive unicast request opportunities for this service flow.

Value— One of the following:

- Number of microseconds in the range 0–4294967295
- Numeric expression
- Parameter of type interval

Default— No value

Editing Level—Basic

`grant-size` *grant-size*—(Optional) Size of the individual data grants provided to the service flow.

Value— One of the following:

- Number of bytes in the range 0–65535
- Numeric expression
- Parameter of type grantSize

Default— No value

Editing Level—Basic

`grants-per-interval` *grants-per-interval*—(Optional) Actual number of data grants given to the service flow during each nominal grant interval.

Value— One of the following:

- Integer in the range 0–127
- Numeric expression
- Parameter of type interval

Default— No value

Editing Level—Basic

`tolerated-grant-jitter` *tolerated-grant-jitter*—(Optional) Maximum amount of time that the transmission opportunities can be delayed beyond the nominal grant interval. A jitter buffer can stop latency, but an improperly sized buffer can cause additional latency.

Value— One of the following:

- Number of microseconds in the range 0–4294967295
- Numeric expression
- Parameter of type jitter

Default— No value

Editing Level—Basic

`nominal-grant-interval` *nominal-grant-interval*—(Optional) Nominal interval between successive unsolicited data grant opportunities for this service flow.

Value— One of the following:

- Number of microseconds in the range 0–4294967295
- Numeric expression
- Parameter of type interval

Default— No value

Editing Level—Basic

`description` *description*—(Optional) Description of the object that you are configuring.

Value—Text

Default— No value

Editing Level—Basic

Required Privilege Level

service

Required Editing Level

Basic

policies group *name* list *name* rule *name* filter

Syntax

```
policies group name list name rule name filter name {
    description description;
}
```

Hierarchy Level

```
[edit policies group name list name rule name filter]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure a filter action. Use this action to discard packets. You can configure filter actions for JUNOS filters and JUNOSe policy rules.

Options

`name name`— Name for the filter action.

Value— Text

`description description`—(Optional) Description of the object that you are configuring.

Value—Text

Default— No value

Editing Level—Basic

Required Privilege Level

service

Required Editing Level

Basic

policies group *name* list *name* rule *name* flow-spec

Syntax

```
policies group name list name rule name flow-spec name {
    service-type service-type;
    token-bucket-rate token-bucket-rate;
    token-bucket-size token-bucket-size;
    peak-data-rate peak-data-rate;
    minimum-policed-unit minimum-policed-unit;
    maximum-packet-size maximum-packet-size;
    rate rate;
    slack-term slack-term;
    description description;
}
```

Hierarchy Level

```
[edit policies group name list name rule name flow-spec]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure a FlowSpec action, which uses an RSVP-style FlowSpec to specify a traffic profile. A FlowSpec is made up of two parts, a traffic specification (TSpec) and a service request specification (RSpec). The TSpec describes the traffic requirements for the flow, and the RSpec specifies resource requirements for the desired service. You can configure FlowSpec actions for PCMM policy rules.

Options

name name— Name of the FlowSpec action.

Value— Text

service-type service-type—(Optional) Type of FlowSpec service.

Value— One of the following:

- 2—*guaranteed_service*, which provides both bandwidth and latency and delay guarantees. A guaranteed service can contain

- both TSpec and RSpec parameters.
- 5—controlled_load_service, which provides minimum bandwidth guarantees, but not latency and delay guarantees. A controlled-load service can contain only TSpec token-bucket parameters, and not RSpec parameters.
- Parameter of type serviceNumber

Default— No value

Editing Level—Basic

`token-bucket-rate` *token-bucket-rate*—(Optional) Guaranteed minimum rate that is reserved for the service flow. Token bucket rate is a TSpec parameter.

Value— One of the following:

- Predefined global parameter `interface_speed`, which is the speed of the subscriber's DOCSIS interface
- Number of bits per second in the range 0–4294967295
- Numeric expression
- Parameter of type rate

Default— No value

Editing Level—Basic

`token-bucket-size` *token-bucket-size*—(Optional) Maximum burst size for the service flow. Token bucket size is a TSpec parameter.

Value— One of the following:

- Number of bits per second in the range 1522–4294967295
- Numeric expression
- Parameter of type tokenBucketSize

Default— No value

Editing Level—Basic

`peak-data-rate` *peak-data-rate*—(Optional) Amount of bandwidth over the committed rate that is allocated to accommodate excess traffic flow over the committed rate. Peak data rate is a TSpec parameter.

Value— One of the following:

- Predefined global parameter `interface_speed`, which is the

- speed of the subscriber's DOCSIS interface
- Number of bits per second in the range 0–4294967295
- Numeric expression
- Parameter of type rate

Default— No value

Editing Level—Basic

`minimum-policed-unit` *minimum-policed-unit*—(Optional) Assumed minimum-reserved-rate packet size. If a packet is smaller than the minimum policed unit, the software treats the packet as if its size is equal to the value specified in this option. Minimum policed unit is a TSpec parameter.

Value— One of the following:

- Number of bytes in the range 0–65535
- Numeric expression
- Parameter of type policedUnit

Default— No value

Editing Level—Basic

`maximum-packet-size` *maximum-packet-size*—(Optional) Maximum packet size for the FlowSpec. Maximum packet size is a TSpec parameter.

Value— One of the following:

- Number of bytes in the range 0–4294967295
- Numeric expression
- Parameter of type packetLength

Default— No value

Editing Level—Basic

`rate` *rate*—(Optional) Average rate. Rate is an RSpec parameter.

Value— One of the following:

- Predefined global parameter `interface_speed`—Speed of the subscriber's DOCSIS interface
- Number of bits per second in the range 0–4294967295
- Numeric expression
- Parameter of type rate

Default— No value
Editing Level—Basic

`slack-term` *slack-term*—(Optional) Amount of slack in the bandwidth reservation that can be used without redefining the reservation. Slack is the difference between the desired delay and the actual delay obtained with the current bandwidth reservation. It allows some flexibility in bandwidth reservations. Slack term is an RSpec parameter.

Value— One of the following:

- Integer in the range 0–4294967295
- Numeric expression
- Parameter of type `slackTerm`

Default— No value
Editing Level—Basic

`description` *description*—(Optional) Description of the object that you are configuring.

Value—Text
Default— No value
Editing Level—Basic

Required Privilege Level

service

Required Editing Level

Basic

policies group *name* list *name* rule *name* forward

Syntax

```
policies group name list name rule name forward name {
    description description;
}
```

Hierarchy Level

```
[edit policies group name list name rule name forward]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure a forward action. Use this action to forward packets, such as packets that are sent by means of a routing table. You can configure forward actions for JUNOS filters and JUNOSe policy rules.

Options

`name name`— Name for the forward action.

Value— Text

`description description`—(Optional) Description of the object that you are configuring.

Value—Text

Default— No value

Editing Level—Basic

Required Privilege Level

service

Required Editing Level

Basic

policies group *name* list *name* rule *name* forwarding-class

Syntax

```
policies group name list name rule name forwarding-class name {
    forwarding-class forwarding-class;
    description description;
}
```

Hierarchy Level

```
[edit policies group name list name rule name forwarding-class]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure a forwarding class action. The forwarding class action causes the router to assign a forwarding class to packets that match the associated classify-traffic condition. You can configure forwarding class actions for JUNOS filter policy rules.

Options

name name— Name of the forwarding class action.

Value— Text

forwarding-class forwarding-class—(Optional) Name of the forwarding class assigned to packets.

Value— One of the following:

- String expression that matches a forwarding class that is configured on the router. Be sure to include quotation marks. For example:
 - "assured-forwarding"
 - "best-effort"
 - "expedited-forwarding"
 - "network-control"
- Parameter of type forwardingClass

Default— No value

Editing Level—Basic

`description` *description*—(Optional) Description of the object that you are configuring.

Value—Text

Default— No value

Editing Level—Basic

Required Privilege Level

service

Required Editing Level

Basic

policies group *name* list *name* rule *name* gate-spec

Syntax

```
policies group name list name rule name gate-spec name {
    session-class-id-priority session-class-id-priority;
    session-class-id-preemption session-class-id-preemption;
    session-class-id-configurable session-class-id-configurable;
    description description;
}
```

Hierarchy Level

```
[edit policies group name list name rule name gate-spec]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure a GateSpec action. Use the GateSpec action to specify the session class ID for a gate. You can configure GateSpec actions for PCMM policy rules.

The session class ID provides a way for the application manager and the policy server to group gates into classes with different authorization characteristics. A CMTS device can perform authorization based not only on the requested QoS and the gate's authorized flow specification (FlowSpec), but also on the session class ID specified in the GateSpec. For example, you could use the session class ID to represent a prioritization scheme that allows either the policy server or the CMTS device to preempt a preauthorized gate in favor of allowing a new gate with a higher priority to be authorized.

Options

name name— Name of the GateSpec action.

Value— Text

session-class-id-priority session-class-id-priority—(Optional) Priority bits in the session class ID. The priority field describes the relative importance of the session as compared with other sessions generated by the same policy decision point.

Value— One of the following:

- Number in the range 0–7, where 0 is low priority and 7 is high priority
- String expression
- Parameter of type `sessionClassIdPriority`

Default— No value

Editing Level—Basic

`session-class-id-preemption` *session-class-id-preemption*—(Optional)
Preemption bit in the session class ID. Use the preemption bit to allocate bandwidth to lower-priority sessions.

Value— One of the following:

- 0—Enables preemption
- 1—Disables preemption
- String expression
- Parameter of type `sessionClassIdPreemption`

Default— No value

Editing Level—Basic

`session-class-id-configurable` *session-class-id-configurable*—
(Optional) Configurable bit in the session class ID. Application managers that provide novel services may use this value to specify new session classes. Use this option if your policy server supports configurable policies based on this value or if your CMTS device implements a novel session class based on this value.

Value— One of the following:

- Number in the range 0–15
- String expression
- Parameter of type `sessionClassIdConfigurable`

Default— No value

Editing Level—Basic

`description` *description*—(Optional) Description of the object that you are configuring.

Value—Text

Default— No value

Editing Level—Basic

Required Privilege Level

service

Required Editing Level

Basic

policies group *name* list *name* rule *name* loss-priority

Syntax

```
policies group name list name rule name loss-priority name {
    loss-priority loss-priority;
    description description;
}
```

Hierarchy Level

```
[edit policies group name list name rule name loss-priority]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure a loss priority action. The loss priority action causes the router to assign a packet loss priority to packets that match the associated classify-traffic condition. You can configure loss priority actions for JUNOS filter policy rules.

Options

name name— Name of the loss priority action.

Value— Text

loss-priority loss-priority—(Optional) Packet loss priority.

Value— One of the following:

- Predefined global parameter:
 - *any_priority*—Sets the packet loss priority to "any." Do not select this value for loss priority actions. In this context, a value of *any_priority* is not valid.
 - *high_priority*—Sets the packet loss priority to high
 - *low_priority*—Sets the packet loss priority to low
- String expression that matches valid values on the router; for example, "high" or "low"
- Parameter of type `packetLossPriority`

Default— No value

Editing Level—Basic

`description` *description*—(Optional) Description of the object that you are configuring.

Value—Text

Default— No value

Editing Level—Basic

Required Privilege Level

service

Required Editing Level

Basic

policies group *name* list *name* rule *name* mark

Syntax

```
policies group name list name rule name mark name {
    description description;
}
```

Hierarchy Level

```
[edit policies group name list name rule name mark]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure a mark action. Use this action to mark packets. You can configure mark actions for JUNOSe and PCMM policy rules.

Options

`name name`— Name for the mark action.

Value— Text

`description description`—(Optional) Description of the object that you are configuring.

Value—Text

Default— No value

Editing Level—Basic

Required Privilege Level

service

Required Editing Level

Basic

policies group *name* list *name* rule *name* mark *name* info

Syntax

```
policies group name list name rule name mark name info {
    value value;
    mask mask;
}
```

Hierarchy Level

```
[edit policies group name list name rule name mark name info]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure the mark value and mark mask for mark actions.

Options

value value—(Optional) For IPv4 packets, sets the ToS field in the IP header. For IPv6 packets, sets the traffic-class field in the IP header.

Value— One of the following:

- Integer in the range 0–255
- Parameter of type tosByteMask

Default— 0

Editing Level—Basic

mask mask—(Optional) Mask associated with the mark value.

Value— One of the following:

- Integer in the range 0–255
- Parameter of type tosByteMask

Default— 255
Editing Level—Basic

Required Privilege Level

service

Required Editing Level

Basic

policies group *name* list *name* rule *name* nat

Syntax

```
policies group name list name rule name nat name {
    translation-type translation-type;
    description description;
}
```

Hierarchy Level

```
[edit policies group name list name rule name nat]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure a NAT action. You can configure NAT actions for JUNOS ASP policy rules.

Options

`name name`— Name for the NAT action.

Value— Text

`translation-type translation-type`—(Optional) Type of network address translation that is used.

Value— One of the following:

- String expression that matches a NAT type on the router; for example:
 - "destination static"—Implements address translation for destination traffic without port translation; makes selected private servers accessible
 - "source dynamic"—Implements address translation for source traffic with port translation
 - "source static"—Implements address translation for source traffic without port mapping
- Parameter of type `natTranslationType`

Default— No value

Editing Level—Basic

`description` *description*—(Optional) Description of the object that you are configuring.

Value—Text

Default— No value

Editing Level—Basic

Required Privilege Level

service

Required Editing Level

Basic

policies group *name* list *name* rule *name* nat *name* ip-network group-network

Syntax

```
policies group name list name rule name nat name ip-network group-network {
    network-specifier network-specifier;
}
```

Hierarchy Level

```
[edit policies group name list name rule name nat name ip-network group-network]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configuration of the network specifier for the NAT action.

Options

`network-specifier network-specifier`—(Optional) Specifies an IP address and mask.

Value— Specify the subnet in one of the following formats:

- [not] < address> /< mask> or < address> /< prefix length>
 - Include *not* to indicate that the condition matches every address that is not in the specified subnet.
 - < prefix length> is a number in the range 0–32, and specifies how many of the first bits in the address specify the network
- For JUNOS ASP policies, you must enter network in the format: < address> /< prefix length>

Default— 0.0.0.0/0.0.0.0

Editing Level—Basic

Required Privilege Level

service

Required Editing Level

Basic

policies group *name* list *name* rule *name* nat *name* port

Syntax

```
policies group name list name rule name nat name port {
    from-port from-port;
}
```

Hierarchy Level

```
[edit policies group name list name rule name nat name port]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure the port range for the NAT action.

Options

`from-port from-port`—(Optional) Port range to restrict port translation when NAT is configured in dynamic-source mode.

Value— One of the following:

- `service_port`—A predefined global parameter that is the port of the service as specified by the service object
- Integer in the range 0–64000
- Numeric expression that indicates a range of ports; for example, 2010..2020
- 0..65535—Provides the same effect as the automatic option. JUNOS routing platforms support a port option called automatic, which means that it is a router-assigned port.
- Parameter of type port

Default— No value

Editing Level—Basic

Required Privilege Level

service

Required Editing Level

Basic

policies group *name* list *name* rule *name* next-hop

Syntax

```
policies group name list name rule name next-hop name {
    next-hop-address next-hop-address;
    description description;
}
```

Hierarchy Level

```
[edit policies group name list name rule name next-hop]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure a next-hop action. Use this action for the ingress side of the interface to specify the next IP address where the classified packets should go. You can configure next-hop actions for JUNOS filters and JUNOS policy rules.

Options

`name name`— Name for the next-hop action.

Value— Text

`next-hop-address next-hop-address`—(Optional) Address of next hop through which to send traffic.

Value— One of the following:

- IP address
- Predefined global parameter:
 - `gateway_ipAddress`—IP address of the gateway as specified by the service object
 - `interface_ipAddress`—IP address of the router interface
 - `service_ipAddress`—IP address of the service as specified by the service object
 - `user_ipAddress`—IP address of the subscriber
 - `virtual_ipAddress`—Virtual portal address of the SAE

- that is used in redundant redirect server installations
- Parameter of type address

Default— 0

Editing Level—Basic

description description—(Optional) Description of the object that you are configuring.

Value—Text

Default— No value

Editing Level—Basic

Required Privilege Level

service

Required Editing Level

Basic

policies group *name* list *name* rule *name* next-interface

Syntax

```
policies group name list name rule name next-interface name {
    interface-specifier interface-specifier;
    next-hop-address next-hop-address;
    description description;
}
```

Hierarchy Level

```
[edit policies group name list name rule name next-interface]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure a next-interface action. Use this action to forward packets to a particular interface and/or a next-hop address. You can configure next-interface actions for JUNOS filters and JUNOSe policy rules. On JUNOSe routers, you can use this action for both ingress and egress sides of the interface.

Options

`name name`— Name for the next-interface action.

Value— Text

`interface-specifier interface-specifier`— IP interface to be used as the next interface for packets.

Value— One of the following:

- For JUNOSe interfaces, enter interface specifiers in the format:

```
'< type of specifier> = < value>'
```

where < type of specifier> is the interface name, alias, description, or UID.

For example: name= 'fastEthernet3/0'

For lists of valid interface specifiers for JUNOSe routers, see "Interface Types and Specifiers" in the JUNOSe Command Reference Guides.

- For JUNOS interfaces, enter interface specifiers in the format:

'name= < mediatype> -< slot> /< pic> /< port> .< unit> '

For example: 'name= AT-0/1/0.0'

- Predefined global parameter:
 - bfwIf (interface that leads to the bronze firewall server)
 - gfwIf (interface that leads to gold firewall server).
- Parameter of type interfaceSpec

Default— No value

Editing Level—Basic

next-hop-address next-hop-address—(Optional) Address of next hop through which to send traffic.

Value— One of the following:

- IP address
- Predefined global parameter:
 - gateway_ipAddress—IP address of the gateway as specified by the service object
 - interface_ipAddress—IP address of the router interface
 - service_ipAddress—IP address of the service as specified by the service object
 - user_ipAddress—IP address of the subscriber
 - virtual_ipAddress—Virtual portal address of the SAE that is used in redundant redirect server installations
- Parameter of type address

Default— 0

Editing Level—Basic

description description—(Optional) Description of the object that you are configuring.

Value—Text
Default— No value
Editing Level—Basic

Required Privilege Level

service

Required Editing Level

Basic

policies group *name* list *name* rule *name* next-rule

Syntax

```
policies group name list name rule name next-rule name {
    description description;
}
```

Hierarchy Level

```
[edit policies group name list name rule name next-rule]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure a next-rule action. If a packet matches the classify-traffic condition, the next-rule action causes the router to continue to the next rule in the policy list for evaluation. You can configure next-rule actions for JUNOS filter policy rules.

Options

`name name`— Name of the next-rule action.

Value— Text

`description description`—(Optional) Description of the object that you are configuring.

Value—Text

Default— No value

Editing Level—Basic

Required Privilege Level

service

Required Editing Level

Basic

policies group *name* list *name* rule *name* policer

Syntax

```
policies group name list name rule name policer name {
    bandwidth-limit bandwidth-limit;
    bandwidth-limit-unit bandwidth-limit-unit;
    burst burst;
    description description;
}
```

Hierarchy Level

```
[edit policies group name list name rule name policer]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure a policer action. The policer action specifies rate and burst size limits and the action taken if a packet exceeds those limits. You can create policer actions in JUNOS policer and JUNOS filter policy rules.

Options

name *name*— Name of the policer action.

Value—Text

bandwidth-limit *bandwidth-limit*—(Optional) Traffic rate, that if exceeded, causes the router to take the indicated packet action.

Value— One of the following:

- Predefined global parameter `interface_speed`, which is the speed of the subscriber's router interface.
- Bits per second in the range 32000–32000000000
- Percentage of bandwidth (1–100)
- Numeric expression
- Parameter of type rate

Default— No value
Editing Level—Basic

`bandwidth-limit-unit` *bandwidth-limit-unit*—(Optional) Indicates the type of value that you entered for bandwidth limit.

Value— One of the following:

- Predefined global parameter:
 - `bps`—Value entered for bandwidth limit is bps
 - `percent`—Value entered for bandwidth limit is a percentage of the port speed
- String expression
- Parameter of type `bandwidthSizeUnit`

Default— No value
Editing Level—Basic

`burst` *burst*—(Optional) Maximum burst size. The minimum recommended value is the maximum transmission unit (MTU) of the IP packets being policed.

Value— One of the following:

- Number of bytes
- Numeric expression; for example `8*64000`
- Parameter of type `burst`

Default— No value
Editing Level—Basic

`description` *description*—(Optional) Description of the object that you are configuring.

Value—Text
Default— No value
Editing Level—Basic

Required Privilege Level

service

Required Editing Level

Basic

policies group *name* list *name* rule *name* policer *name* packet-action

Syntax

```
policies group name list name rule name policer name packet-action name ...
```

Hierarchy Level

```
[edit policies group name list name rule name policer name packet-action]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure the action taken on a packet.

Options

name name— Name for the action that is taken on packets that exceed the rate and burst size limits specified in the policer action.

Value— Text

Required Privilege Level

service

Required Editing Level

Basic

policies group *name* list *name* rule *name* policer *name* packet-action *name* filter

Syntax

```
policies group name list name rule name policer name packet-action name filter  
{  
}
```

Hierarchy Level

```
[edit policies group name list name rule name policer name packet-  
action name filter]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Specify that if traffic flow exceeds the bandwidth and burst rate limits, the packet is dropped.

Options

Required Privilege Level

service

Required Editing Level

Basic

policies group *name* list *name* rule *name* policer *name* packet-action *name* forwarding-class

Syntax

```
policies group name list name rule name policer name packet-
action name forwarding-class {
    forwarding-class forwarding-class;
}
```

Hierarchy Level

```
[edit policies group name list name rule name policer name packet-
action name forwarding-class]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Specify that if traffic flow exceeds the bandwidth and burst rate limits, it is assigned to a forwarding class.

Options

`forwarding-class forwarding-class`—(Optional) Name of the forwarding class assigned to packets.

Value— One of the following:

- String expression that matches a forwarding class that is configured on the router. Be sure to include quotation marks. For example:
 - "assured-forwarding"
 - "best-effort"
 - "expedited-forwarding"
 - "network-control"
- Parameter of type forwardingClass

Default— No value

Editing Level—Basic

Required Privilege Level

service

Required Editing Level

Basic

policies group *name* list *name* rule *name* policer *name* packet-action *name* loss-priority

Syntax

```
policies group name list name rule name policer name packet-action name loss-
priority {
    loss-priority loss-priority;
}
```

Hierarchy Level

```
[edit policies group name list name rule name policer name packet-
action name loss-priority]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

For a policer action, set the loss priority level as the action taken on a packet that exceeds its rate limit.

Options

`loss-priority loss-priority`—(Optional) Packet loss priority.

Value— One of the following:

- Predefined global parameter:
 - `any_priority`—Sets the packet loss priority to "any." Do not select this value for loss priority actions. In this context, a value of `any_priority` is not valid.
 - `high_priority`—Sets the packet loss priority to high
 - `low_priority`—Sets the packet loss priority to low
- String expression that matches valid values on the router; for example, "high" or "low"
- Parameter of type `packetLossPriority`

Default— No value

Editing Level—Basic

Required Privilege Level

service

Required Editing Level

Basic

policies group *name* list *name* rule *name* policer *name* packet-action *name* parameter

Syntax

```
policies group name list name rule name policer name packet-
action name parameter {
    action action;
}
```

Hierarchy Level

```
[edit policies group name list name rule name policer name packet-
action name parameter]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Specify that if traffic flow exceeds the bandwidth and burst rate limits, the action specified by the parameter is applied.

Options

`action action`—(Optional) Parameter that specifies the action to take on traffic.

Value— Parameter of type packetOperation.

Default— No value

Editing Level—Basic

Required Privilege Level

service

Required Editing Level

Basic

policies group *name* list *name* rule *name* qos-attach

Syntax

```
policies group name list name rule name qos-attach name {
    qos-profile qos-profile;
    qos-parameters qos-parameters;
    description description;
}
```

Hierarchy Level

```
[edit policies group name list name rule name qos-attach]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure a QoS attachment action. Use this action to specify the name of the QoS profile and the QoS parameters list to attach to the router interface when this action is taken. You can configure QoS profile attachment actions for JUNOS policy rules.

Options

`name name`— Name for the QoS profile attachment action.

Value— Text

`qos-profile qos-profile`— Name of the QoS profile to attach to the JUNOS interface when this action is taken.

Value— One of the following:

- Name of a QoS profile that is configured on the router. Enclose the name in quotation marks. For example: "qp-vod-1024".
- Parameter of type qosProfileSpec.

Default— No value

Editing Level—Basic

`qos-parameters` *qos-parameters*—(Optional) Name-value pairs of the QoS parameters to attach to the interface when this action is taken. The parameters are configured on the JUNOSe router and referenced in the scheduler profiles referred to by the QoS profile.

Value— One of the following:

- Name-value pair that defines QoS parameter; map expressions define multiple QoS parameters.

Maps are a list of `parameterName= parameterValue` pairs separated by commas and enclosed in curly brackets. For example, the map `{ max-bw= 512000, shape-rate= 1000000 }` supplies two QoS parameters.

- Parameter of type map.

Default— No value

Editing Level—Basic

`description` *description*—(Optional) Description of the object that you are configuring.

Value—Text

Default— No value

Editing Level—Basic

Required Privilege Level

service

Required Editing Level

Basic

policies group *name* list *name* rule *name* qos-condition

Syntax

```
policies group name list name rule name qos-condition name {
    forwarding-class forwarding-class;
    description description;
}
```

Hierarchy Level

```
[edit policies group name list name rule name qos-condition]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure a QoS condition. You can create QoS conditions within JUNOS scheduler policy rules.

Options

`name name`— Name for the QoS condition.

Value— Text

`forwarding-class forwarding-class`—(Optional) Matches packets based on forwarding class

Value— One of the following:

- String expression that matches forwarding classes that are configured on the router. Be sure to include quotation marks. For example:
 - "assured-forwarding"
 - "best-effort"
 - "expedited-forwarding"
 - "network-control"
- Parameter of type forwardingClass

Default— No value

Editing Level—Basic

description description—(Optional) Description of the object that you are configuring.

Value—Text

Default— No value

Editing Level—Basic

Required Privilege Level

service

Required Editing Level

Basic

policies group *name* list *name* rule *name* rate-limit

Syntax

```
policies group name list name rule name rate-limit name {
    type type;
    committed-rate committed-rate;
    committed-burst committed-burst;
    peak-rate peak-rate;
    peak-burst peak-burst;
    excess-burst excess-burst;
    description description;
}
```

Hierarchy Level

```
[edit policies group name list name rule name rate-limit]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure a rate-limit action. Use this action to define the quality of service. You can configure rate-limit actions for JUNOS policy rules.

Options

name *name*— Name for the rate-limit action.

Value— Text

type *type*— Specify that the rate-limit profile is either one rate or two rate. The one-rate rate-limit profile provides a hard-limit rate limiter or a TCP-friendly rate limiter. The two-rate rate-limit profile provides a two-rate, three-color marking mechanism.

Value— One of the following:

- *one_rate*—Uses a single-rate committed rate with two burst parameters: committed burst and excess burst; supports a TCP-friendly rate limiter
- *two_rate*—Uses committed rate and peak rate, each with a

- burst parameter
- Parameter of type rateLimitType

Default— No value

Editing Level—Basic

`committed-rate` *committed-rate*—(Optional) Target rate for the traffic that the policy covers.

Value— One of the following:

- Predefined global parameter `interface_speed`, which is the speed of the subscriber's router interface
- Number of bits per second in the range 0–4294967295
- Parameter of type rate

Default— 0

Editing Level—Basic

`committed-burst` *committed-burst*—(Optional) Amount of bandwidth allocated to burst traffic in bytes.

Value— One of the following:

- Number of bytes in the range 8192–4294967295
- Numeric expression.
- Parameter of type burst

For example, `max(qos*0.1/8, 16384)` sets the burst size to the maximum of 100-ms burst at committed rate (`qos*0.1`) in bytes (/8) or 16384

where `qos` is a local parameter that represents the committed rate

Default— 16384

Editing Level—Basic

`peak-rate` *peak-rate*—(Optional) For two-rate rate-limit profiles, specifies the amount of bandwidth allocated to excess traffic flow over the committed rate.

Value— One of the following:

- Predefined global parameter `interface_speed`, which is the

- speed of the subscriber's router interface
- Number of bits per second in the range 0–4294967295
- Numeric expression
- Parameter of type rate

For example, $qos * 1.5$ sets the peak rate to 1.5 times the committed rate

where qos is a local parameter that represents the committed rate

Default— 0

Editing Level—Basic

peak-burst *peak-burst*—(Optional) For two-rate rate-limit profiles, specifies the amount of bandwidth allocated to burst traffic in excess of the peak rate.

Value— One of the following:

- Number of bytes in the range 8192–4294967295
- Numeric expression
- Parameter of type burst

For example, $\max(qos * 1.5 * 0.1/8, 16384)$

where qos is a local parameter that represents the committed rate

Default— 16384

Editing Level—Basic

excess-burst *excess-burst*—(Optional) For one-rate rate-limit profiles, specifies the amount of bandwidth allocated to accommodate burst traffic.

Value— One of the following:

- Number of bytes in the range $< 0 \mid [\text{committed-burst} + 1, 4294967295] >$
- Numeric expression
- Parameter of type burst

Default— No value

Editing Level—Basic

description *description*—(Optional) Description of the object that you are

configuring.

Value—Text

Default— No value

Editing Level—Basic

Required Privilege Level

service

Required Editing Level

Basic

policies group *name* list *name* rule *name* rate-limit *name* committed-action filter

Syntax

```
policies group name list name rule name rate-limit name committed-  
action filter {  
}
```

Hierarchy Level

```
[edit policies group name list name rule name rate-limit name committed-  
action filter]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Specify that if traffic flow does not exceed the committed rate, the packet is dropped.

Options

Required Privilege Level

service

Required Editing Level

Basic

policies group *name* list *name* rule *name* rate-limit *name* committed-action forward

Syntax

```
policies group name list name rule name rate-limit name committed-  
action forward {  
}
```

Hierarchy Level

```
[edit policies group name list name rule name rate-limit name committed-  
action forward]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Specify that if traffic flow does not exceed the committed rate, the packet is forwarded.

Options

Required Privilege Level

service

Required Editing Level

Basic

policies group *name* list *name* rule *name* rate-limit *name* committed-action mark mark-info

Syntax

```
policies group name list name rule name rate-limit name committed-
action mark mark-info {
    value value;
    mask mask;
}
```

Hierarchy Level

```
[edit policies group name list name rule name rate-limit name committed-
action mark mark-info]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure the mark value and the mark mask.

Options

`value value`—(Optional) Value of the ToS byte in the IP packet header.

Value— Integer in the range 0–255

Default— 0

Editing Level—Basic

`mask mask`—(Optional) Mask of specific bits in the ToS byte.

Value— Integer in the range 0–255

Default— 255

Editing Level—Basic

Required Privilege Level

service

Required Editing Level

Basic

policies group *name* list *name* rule *name* rate-limit *name* committed-action parameter

Syntax

```
policies group name list name rule name rate-limit name committed-
action parameter {
    action action;
}
```

Hierarchy Level

```
[edit policies group name list name rule name rate-limit name committed-
action parameter]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Specify that if traffic flow does not exceed the committed rate, the action specified by the parameter is applied.

Options

`action action`—(Optional) Parameter that specifies the action to take on traffic.

Value— Parameter of type packetOperation.

Default— No value

Editing Level—Basic

Required Privilege Level

service

Required Editing Level

Basic

policies group *name* list *name* rule *name* rate-limit *name* conformed-action filter

Syntax

```
policies group name list name rule name rate-limit name conformed-  
action filter {  
}
```

Hierarchy Level

```
[edit policies group name list name rule name rate-limit name conformed-  
action filter]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Specify that if traffic flow exceeds the committed rate but remains below the peak rate, the packet is dropped.

Options

Required Privilege Level

service

Required Editing Level

Basic

policies group *name* list *name* rule *name* rate-limit *name* conformed-action forward

Syntax

```
policies group name list name rule name rate-limit name conformed-  
action forward {  
}
```

Hierarchy Level

```
[edit policies group name list name rule name rate-limit name conformed-  
action forward]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Specify that if traffic flow exceeds the committed rate but remains below the peak rate, the packet is forwarded.

Options

Required Privilege Level

service

Required Editing Level

Basic

policies group *name* list *name* rule *name* rate-limit *name* conformed-action mark mark-info

Syntax

```
policies group name list name rule name rate-limit name conformed-
action mark mark-info {
    value value;
    mask mask;
}
```

Hierarchy Level

```
[edit policies group name list name rule name rate-limit name conformed-
action mark mark-info]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure the mark value and the mark mask.

Options

`value value`—(Optional) Value of the ToS byte in the IP packet header.

Value— Integer in the range 0–255

Default— 0

Editing Level—Basic

`mask mask`—(Optional) Mask of specific bits in the ToS byte.

Value— Integer in the range 0–255

Default— 255

Editing Level—Basic

Required Privilege Level

service

Required Editing Level

Basic

policies group *name* list *name* rule *name* rate-limit *name* conformed-action parameter

Syntax

```
policies group name list name rule name rate-limit name conformed-
action parameter {
    action action;
}
```

Hierarchy Level

```
[edit policies group name list name rule name rate-limit name conformed-
action parameter]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Specify that if traffic flow exceeds the committed rate but remains below the peak rate, the action specified by the parameter is applied.

Options

`action action`—(Optional) Parameter that specifies the action to take on traffic.

Value— Parameter of type packetOperation.

Default— No value

Editing Level—Basic

Required Privilege Level

service

Required Editing Level

Basic

policies group *name* list *name* rule *name* rate-limit *name* exceed-action filter

Syntax

```
policies group name list name rule name rate-limit name exceed-action filter {  
}
```

Hierarchy Level

```
[edit policies group name list name rule name rate-limit name exceed-  
action filter]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Specify that if traffic flow exceeds the peak rate, the packet is dropped.

Options

Required Privilege Level

service

Required Editing Level

Basic

policies group *name* list *name* rule *name* rate-limit *name* exceed-action forward

Syntax

```
policies group name list name rule name rate-limit name exceed-action forward {  
}
```

Hierarchy Level

```
[edit policies group name list name rule name rate-limit name exceed-  
action forward]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Specify that if traffic flow exceeds the peak rate, the packet is forwarded.

Options

Required Privilege Level

service

Required Editing Level

Basic

policies group *name* list *name* rule *name* rate-limit *name* exceed-action mark mark-info

Syntax

```
policies group name list name rule name rate-limit name exceed-
action mark mark-info {
    value value;
    mask mask;
}
```

Hierarchy Level

```
[edit policies group name list name rule name rate-limit name exceed-
action mark mark-info]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure the mark value and the mark mask.

Options

`value value`—(Optional) Value of the ToS byte in the IP packet header.

Value— Integer in the range 0-255

Default— 0

Editing Level—Basic

`mask mask`—(Optional) Mask of specific bits in the ToS byte.

Value— Integer in the range 0-255

Default— 255

Editing Level—Basic

Required Privilege Level

service

Required Editing Level

Basic

policies group *name* list *name* rule *name* rate-limit *name* exceed-action parameter

Syntax

```
policies group name list name rule name rate-limit name exceed-
action parameter {
    action action;
}
```

Hierarchy Level

```
[edit policies group name list name rule name rate-limit name exceed-
action parameter]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Specify that if traffic flow exceeds the peak rate, the action specified by the parameter is applied.

Options

`action action`—(Optional) Parameter that specifies the action to take on traffic.

Value— Parameter of type packetOperation.

Default— No value

Editing Level—Basic

Required Privilege Level

service

Required Editing Level

Basic

policies group *name* list *name* rule *name* reject

Syntax

```
policies group name list name rule name reject name {
    message-type message-type;
    description description;
}
```

Hierarchy Level

```
[edit policies group name list name rule name reject]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure a reject action. The reject action causes the router to discard a packet and send an ICMP destination unreachable message. You can configure reject actions for JUNOS filter policy rules.

Options

`name name`— Name of the reject action.

Value— Text

`message-type message-type`—(Optional) Type of ICMP destination unreachable message sent to the client.

Value— One of the following:

- String expression that matches a type of ICMP destination unreachable message supported on the router; for example:
 - "administratively-prohibited"
 - "bad-host-tos"
 - "bad-network-tos"
 - "host-prohibited"
 - "host-unknown"
 - "host-unreachable"
 - "network-prohibited"
 - "network-unknown"
 - "network-unreachable"

- "port-unreachable"
- "precedence-cutoff"
- "precedence-violation"
- "protocol-unreachable"
- "source-host-isolated"
- "source-route-failed"
- "tcp-reset"—If you specify tcp-reset, a TCP reset message is sent if the packet is a TCP packet. Otherwise, nothing is sent.
- Parameter of type messageType

Default— No value

Editing Level—Basic

description *description*—(Optional) Description of the object that you are configuring.

Value—Text

Default— No value

Editing Level—Basic

Required Privilege Level

service

Required Editing Level

Basic

policies group *name* list *name* rule *name* routing-instance

Syntax

```
policies group name list name rule name routing-instance name {
    routing-instance routing-instance;
    description description;
}
```

Hierarchy Level

```
[edit policies group name list name rule name routing-instance]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure a routing instance action. Use routing instance actions for filter-based forwarding to direct traffic to a specific routing instance configured on the router. You can configure routing instance actions for JUNOS filter policy rules.

Options

name name— Name of the routing instance action.

Value— Text

routing-instance routing-instance—(Optional) Routing instance on the router to which packets are forwarded.

Value— One of the following:

- String expression that matches the name of a routing instance configured on the router; for example "isp2-route-table"
- Parameter of type routingInstance

Default— No value

Editing Level—Basic

`description` *description*—(Optional) Description of the object that you are configuring.

Value—Text

Default— No value

Editing Level—Basic

Required Privilege Level

service

Required Editing Level

Basic

policies group *name* list *name* rule *name* scheduler-action

Syntax

```
policies group name list name rule name scheduler-action name {
    buffer-size buffer-size;
    buffer-size-unit buffer-size-unit;
    priority priority;
    transmit-rate transmit-rate;
    transmit-rate-unit transmit-rate-unit;
    exact exact;
    description description;
}
```

Hierarchy Level

```
[edit policies group name list name rule name scheduler-action]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure a scheduler action. You use scheduler actions along with QoS conditions and traffic-shape actions to configure transmission scheduling and rate control. Schedulers define the priority, bandwidth, delay buffer size, rate control status, and random early detection (RED) drop profiles to be applied to a particular class of traffic. You can create scheduler actions in JUNOS scheduler policy rules.

Options

`name name`— Name for the scheduler action.

Value— Text

`buffer-size buffer-size`—(Optional) Queue transmission buffer size.

Value— One of the following:

- Integer that represents the number of microseconds or a percentage of total buffer size.
- "remainder"—Uses available buffer that is not assigned to other queues.

- Expression
- Parameter of type `schedulerBufferSize`

Default— No value

Editing Level—Basic

`buffer-size-unit` *buffer-size-unit*—(Optional) Type of value that you entered for buffer size.

Value— One of the following:

- Predefined global parameter:
 - `buffer_size_percentage`—The value is a percentage of the total buffer.
 - `buffer_size_remainder`—The value is the remaining buffer available.
 - `temporal`—The value is temporal, in microseconds.
- String expression; for example, "percent"
- Parameter of type `schedulerBufferSizeUnit`

Default— No value

Editing Level—Basic

`priority` *priority*—(Optional) Packet-scheduling priority. The priority determines the order in which an output interface transmits traffic from the queues.

Value— One of the following:

- Predefined global parameter:
 - `low`
 - `medium_low`
 - `medium_high`
 - `high`—Assigning high priority to a queue prevents the queue from being starved by traffic in a strict high-priority queue
 - `strict_high`—Configures a high-priority queue with unlimited transmission bandwidth available to it. As long as it has traffic to send, the strict high-priority queue receives precedence over low, medium-low, and medium-high priority queues, but not high-priority queues. You can configure strict high-priority on only one queue per interface.
- String expression—For example, "strict-high"
- Parameter of type `schedulerPriority`

Default— No value

Editing Level—Basic

`transmit-rate` *transmit-rate*—(Optional) Transmit rate.

Value— One of the following:

- Integer that represents the rate in bps or a percentage of bandwidth
- "remainder"—Uses remaining rate available
- Numeric expression
- Parameter of type schedulerTransmitRate

Default— No value

Editing Level—Basic

`transmit-rate-unit` *transmit-rate-unit*—(Optional) Type of value that you entered for transmit rate.

Value—Text

Default— No value

Editing Level—Basic

`exact` *exact*—(Optional) Specifies whether or not to enforce the exact transmission rate. Under sustained congestion, a rate-controlled queue that goes into negative credit fills up and eventually drops packets.

Value— True or false

Default— No value

Editing Level—Basic

`description` *description*—(Optional) Description of the object that you are configuring.

Value—Text

Default— No value

Editing Level—Basic

Required Privilege Level

service

Required Editing Level

Basic

policies group *name* list *name* rule *name* scheduler-action *name* drop-profile

Syntax

```
policies group name list name rule name scheduler-action name drop-
profile name {
    loss-priority loss-priority;
    protocol protocol;
    drop-probability drop-probability;
    drop-profile-type drop-profile-type;
    queue-threshold queue-threshold;
}
```

Hierarchy Level

```
[edit policies group name list name rule name scheduler-action name drop-
profile]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure a drop profile. The scheduler drop profile defines the drop probabilities across the range of delay-buffer occupancy, thereby supporting the RED process. For a packet to be dropped, it must match the drop profile. When a packet arrives, RED checks the queue fill level. If the fill level corresponds to a nonzero drop probability, the RED algorithm determines whether to drop the arriving packet. Depending on the drop probabilities, RED might drop packets aggressively long before the buffer becomes full, or it might drop only a few packets even if the buffer is almost full.

In drop profiles you configure queue threshold (fill level) and drop probability as paired values. The values can be either percentage values (segmented) or data points (interpolated). These two alternatives enable you to configure each drop probability at up to 64 queue threshold/drop-probability paired values, or to configure a profile represented as a series of line segments. For more information about configuring fill level and drop probabilities, see the JUNOS routing platform documentation.

Options

`name name`— Name for the drop profile.

Value— Text

`loss-priority` *loss-priority*— Packet loss priority.

Value—Text

Default— No value

Editing Level—Basic

`protocol` *protocol*— Protocol type for the drop profile map. The protocol type is ignored for priority levels greater than 2.

Value—Text

Default— No value

Editing Level—Basic

`drop-probability` *drop-probability*— Probability that a packet will be dropped.

Value— One of the following:

- If the drop profile type is segmented, specify the drop probability as a percentage. A value of 0 means that a packet will never be dropped, and a value of 100 means that all packets will be dropped. The range is 0–100.
- If the drop profile type is interpolated, specify a data point for packet drop probability in the range 0–100.
- Predefined parameter:
 - `fwEnterpriseMaxPriority`
 - `fwEnterpriseMinPriority`
 - `fwMaxPriority`
 - `fwMinPriority`
- Parameter of type percent

Default— No value

Editing Level—Basic

`drop-profile-type` *drop-profile-type*— Relationship between the queue threshold (fill level) and drop probability.

Value— One of the following:

- Predefined global parameter:
 - `interpolated`—Specifies values for interpolating relationship between queue fill level and drop probability
 - `segmented`—Specifies fill level and drop probability as percentages
- Parameter of type `dropProfileType`

Default— No value

Editing Level—Basic

`queue-threshold` *queue-threshold*— Fill level of the queue.

Value— One of the following:

- If the drop profile type is segmented, specify how full the queue is as a percentage.
- If the drop profile type is interpolated, specify a data point for mapping the queue fill percentage in the range 0–100.
- Parameter of type percent

Default— No value

Editing Level—Basic

Required Privilege Level

service

Required Editing Level

Basic

policies group *name* list *name* rule *name* service-class-name

Syntax

```
policies group name list name rule name service-class-name name {
    service-class-name service-class-name;
    description description;
}
```

Hierarchy Level

```
[edit policies group name list name rule name service-class-name]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure a service class name action. You can configure service class name actions for PCMM policy rules.

Options

`name name`— Name of the service class name action.

Value— Text

`service-class-name service-class-name`—(Optional) Name of a service class on the CMTS device that specifies QoS parameters for a service flow.

Value— One of the following:

- Name of a service class
- String expression
- Parameter of type `serviceName`

Default— No value

Editing Level—Basic

`description description`—(Optional) Description of the object that you are configuring.

Value—Text

Default— No value

Editing Level—Basic

Required Privilege Level

service

Required Editing Level

Basic

policies group *name* list *name* rule *name* stateful-firewall

Syntax

```
policies group name list name rule name stateful-firewall name {
    description description;
}
```

Hierarchy Level

```
[edit policies group name list name rule name stateful-firewall]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure a stateful firewall action. Stateful firewall actions specify the action to take on packets that match the classify-traffic condition. You can configure stateful firewall actions for JUNOS ASP policy rules.

Options

`name name`— Name for the stateful firewall action.

Value— Text

`description description`—(Optional) Description of the object that you are configuring.

Value—Text

Default— No value

Editing Level—Basic

Required Privilege Level

service

Required Editing Level

Basic

policies group *name* list *name* rule *name* stateful-firewall *name* packet-action filter

Syntax

```
policies group name list name rule name stateful-firewall name packet-  
action filter {  
}
```

Hierarchy Level

```
[edit policies group name list name rule name stateful-firewall name packet-  
action filter]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Set the packet action for a stateful firewall to filter. The packet is not accepted and is not processed further.

Options

Required Privilege Level

service

Required Editing Level

Basic

policies group *name* list *name* rule *name* stateful-firewall *name* packet-action forward

Syntax

```
policies group name list name rule name stateful-firewall name packet-  
action forward {  
}
```

Hierarchy Level

```
[edit policies group name list name rule name stateful-firewall name packet-  
action forward]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Set the packet action for a stateful firewall to forward.

Options

Required Privilege Level

service

Required Editing Level

Basic

policies group *name* list *name* rule *name* stateful-firewall *name* packet-action parameter

Syntax

```
policies group name list name rule name stateful-firewall name packet-
action parameter {
    action action;
}
```

Hierarchy Level

```
[edit policies group name list name rule name stateful-firewall name packet-
action parameter]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Set the packet action for a stateful firewall to parameter. The action specified in the parameter is applied.

Options

action action—(Optional) Parameter that specifies the action to take on traffic.

Value— Parameter of type packetOperation.

Default— No value

Editing Level—Basic

Required Privilege Level

service

Required Editing Level

Basic

policies group *name* list *name* rule *name* stateful-firewall *name* packet-action reject

Syntax

```
policies group name list name rule name stateful-firewall name packet-
action reject {
    message-type message-type;
}
```

Hierarchy Level

```
[edit policies group name list name rule name stateful-firewall name packet-
action reject]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Set the action for a stateful firewall to reject. The packet is not accepted, and a rejection message is returned; UDP sends an ICMP unreachable code, and TCP sends RST Reject action in stateful firewall.

Options

`message-type message-type`—(Optional) Type of ICMP destination unreachable message sent to the client.

Value— One of the following:

- String expression that matches a type of ICMP destination unreachable message supported on the router; for example:
 - "administratively-prohibited"
 - "bad-host-tos"
 - "bad-network-tos"
 - "host-prohibited"
 - "host-unknown"
 - "host-unreachable"
 - "network-prohibited"
 - "network-unknown"
 - "network-unreachable"
 - "port-unreachable"
 - "precedence-cutoff"
 - "precedence-violation"

- "protocol-unreachable"
- "source-host-isolated"
- "source-route-failed"
- "tcp-reset"—If you specify tcp-reset, a TCP reset message is sent if the packet is a TCP packet. Otherwise, nothing is sent.
- Parameter of type messageType

Default— No value

Editing Level—Basic

Required Privilege Level

service

Required Editing Level

Basic

policies group *name* list *name* rule *name* traffic-class

Syntax

```
policies group name list name rule name traffic-class name {
    traffic-class traffic-class;
    description description;
}
```

Hierarchy Level

```
[edit policies group name list name rule name traffic-class]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure a traffic-class action. Use this action to put packets in a particular traffic class. You can configure traffic-class actions for JUNOS policy rules.

Options

`name name`— Name for the traffic-class action.

Value— Text

`traffic-class traffic-class`— Name of the traffic-class profile that is applied to a packet when it passes through the router.

Value— One of the following:

- Name of a traffic-class profile that is configured on the router
- Parameter of type trafficClassSpec

Default— No value

Editing Level— Basic

`description description`—(Optional) Description of the object that you are configuring.

Value—Text

Default— No value

Editing Level—Basic

Required Privilege Level

service

Required Editing Level

Basic

policies group *name* list *name* rule *name* traffic-condition

Syntax

```
policies group name list name rule name traffic-condition name {
    match-direction match-direction;
    description description;
}
```

Hierarchy Level

```
[edit policies group name list name rule name traffic-condition]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure a classify-traffic condition. A classify-traffic condition contains values or fields that a packet must contain. If a policy rule does not contain a match condition, all packets are considered to match.

You can create classify-traffic conditions in JUNOSe policy rules, in JUNOS ASP and JUNOS filter policy rules, and in PCMM policy rules.

Options

`name name`— Name for the classify-traffic condition.

Value— Text

`match-direction match-direction`—(Optional) Applies only to JUNOS ASP policy rules. Matches packets based on the direction of the packet flow. For stateful firewall actions, this value is used in place of the **policies group list *name* applicability** statement.

Value— One of the following:

- input
- output
- both (Both is invalid for NAT actions.)
- String expression
- Parameter of type matchDirection

Default— No value

Editing Level—Basic

`description` *description*—(Optional) Description of the object that you are configuring.

Value—Text

Default— No value

Editing Level—Basic

Required Privilege Level

service

Required Editing Level

Basic

policies group *name* list *name* rule *name* traffic-condition *name* application-protocol-condition

Syntax

```
policies group name list name rule name traffic-condition name application-
protocol-condition name {
    protocol protocol;
    application-protocol application-protocol;
    idle-timeout idle-timeout;
    dce-rpc-uuid dce-rpc-uuid;
    rpc-program-number rpc-program-number;
    snmp-command snmp-command;
    ttl-threshold ttl-threshold;
}
```

Hierarchy Level

```
[edit policies group name list name rule name traffic-
condition name application-protocol-condition]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure application protocols for stateful firewall and NAT services to use in match condition rules. An application protocol defines application parameters by using information from network layer 3 and above. Examples of such applications are FTP and H.323.

Options

name name— Name for the application protocol condition.

Value— Text

protocol protocol—(Optional) Protocol matched by this classifier list.

Value— One of the following:

- Predefined parameter of type protocol

- Protocol number in the range 0–257
- For PCMM classifiers, there are two special protocol values:
 - 256 matches traffic that has any IP protocol value
 - 257 matches both TCP and UDP traffic
- String expression

Default— No value

Editing Level—Basic

`application-protocol` *application-protocol*—(Optional) Application protocol to match.

Value— One of the following:

- Predefined global parameter:
 - `bootp`—BOOTP protocol
 - `dce_rpc`—DCE RPC protocol
 - `dce_rpc_portmap`—DCE RPC portmap
 - `dns`—DNS protocol
 - `exec`—Exec protocol
 - `ftp`—FTP protocol
 - `h323`—H.323 protocol
 - `icmp_app`—ICMP protocol
 - `iiop`—Internet Inter-ORB Protocol, a TCP protocol
 - `netbios`—NetBIOS protocol
 - `netshow`—NetShow protocol
 - `realaudio`—RealAudio protocol
 - `rpc`—RPC UDP or TCP protocols
 - `rpc_portmap`—RPC portmap protocol
 - `rtsp`—Real-Time Streaming Protocol
 - `shell`—Shell protocol
 - `snmp`—SNMP protocol
 - `sqlnet`—SQLNet protocol
 - `tftp`—Trivial File Transfer Protocol
 - `traceroute`—Traceroute protocol
 - `winframe`—WinFrame protocol
- String expression that matches an application protocol name supported on the router
- Map expression—You can use a map expression to define multiple attributes with one command. Maps are a list of `attributeName= value` pairs separated by commas and enclosed in curly brackets.

For example, the map `{ applicationProtocol= "ftp", sourcePort= 123, inactivityTimeout= 60 }` supplies the application protocol, source port, and inactivity timeout in one command. Another map `{ applicationProtocol= "tcp", inactivityTimeout= 60, destinationPort= 80 }` supplies the protocol, inactivity timeout, and destination port.

- Parameter of type `applicationProtocol`—You can add a map expression as the default value of the parameter.

Default— No value

Editing Level—Basic

`idle-timeout` *idle-timeout*—(Optional) Length of time the application is inactive before it times out.

Value— One of the following:

- Number of seconds in the range 4–65535
- Numeric expression
- Parameter of type `timeout`

Default— Unspecified; the router's default value is used

Editing Level—Basic

`dce-rpc-uuid` *dce-rpc-uuid*—(Optional) For the DCE RPC application protocol, specifies the universal unique identifier (UUID). For information about UUIDs, see <http://www.opengroup.org/onlinepubs/9629399/apdx.htm>.

Value— One of the following:

- Hex digits in the format `xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx`
- Numeric expression
- Parameter of type `dceRpcUuid`

Default— `dceRpcUuid`

Editing Level—Basic

`rpc-program-number` *rpc-program-number*—(Optional) For the remote procedure call (RPC) application protocol, specifies an RPC program number.

Value— One of the following:

- Integer—RPC or DCE program number in the range 100000–400000
- Numeric expression
- Parameter of type `rpcProgramNumber`

Default— No value
Editing Level—Basic

`snmp-command` *snmp-command*—(Optional) SNMP command for packet matching.

Value— One of the following:

- Predefined parameter:
 - `get`
 - `get_next`
 - `set`
 - `trap`
- String expression that matches an SNMP command supported on the router
- Parameter of type `snmpCommand`

Default— No value
Editing Level—Basic

`t11-threshold` *t11-threshold*—(Optional) For the traceroute application protocol, specifies the traceroute time-to-live (TTL) threshold value. This value sets the acceptable level of network penetration for trace routing.

Value— One of the following:

- Integer in the range 0–255
- Numeric expression
- Parameter of type `traceRouteTtlThreshold`

Default— No value
Editing Level—Basic

Required Privilege Level

service

Required Editing Level

Basic

policies group *name* list *name* rule *name* traffic-condition *name* application-protocol-condition *name* proto-attr

Syntax

```
policies group name list name rule name traffic-condition name application-
protocol-condition name proto-attr {
    icmp-type icmp-type;
    icmp-code icmp-code;
}
```

Hierarchy Level

```
[edit policies group name list name rule name traffic-
condition name application-protocol-condition name proto-attr]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure ICMP packet type and code.

Options

`icmp-type icmp-type`—(Optional) ICMP packet type.

Value— One of the following:

- Integer in the range 0–255 that represents an ICMP packet type supported on the router
- Numeric expression
- Parameter of type icmpType

Default— No value

Editing Level—Basic

`icmp-code icmp-code`—(Optional) ICMP code

Value— One of the following:

- Integer in the range 0–255 that represents an ICMP code supported on the router
- Numeric expression
- Parameter of type icmpCode

Default— No value

Editing Level—Basic

Required Privilege Level

service

Required Editing Level

Basic

policies group *name* list *name* rule *name* traffic-condition *name* application-protocol-condition *name* proto-attr destination-port port

Syntax

```
policies group name list name rule name traffic-condition name application-
protocol-condition name proto-attr destination-port port {
    from-port from-port;
}
```

Hierarchy Level

```
[edit policies group name list name rule name traffic-
condition name application-protocol-condition name proto-attr destination-
port port]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure matching destination ports.

Options

from-port from-port—(Optional) Destination port

Value— One of the following:

- *service_port*—A predefined global parameter that is the port of the service as specified by the service object
- Integer in the range 0–65535
- Expression—A range of port numbers; for example, 10..20
- Parameter of type port

Use a range of ports to specify port numbers that are greater than or less than a specified port number. For example:

- To set a range of ports that is greater than 10, use 11..65535.
- To set a range of ports that is less than 200, use 0..199.

Default— No value

Editing Level—Basic

Required Privilege Level

service

Required Editing Level

Basic

policies group *name* list *name* rule *name* traffic-condition *name* application-protocol-condition *name* proto-attr source-port port

Syntax

```
policies group name list name rule name traffic-condition name application-
protocol-condition name proto-attr source-port port {
    from-port from-port;
}
```

Hierarchy Level

```
[edit policies group name list name rule name traffic-
condition name application-protocol-condition name proto-attr source-port port]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure matching source ports.

Options

from-port from-port—(Optional) Source port

Value— One of the following:

- *service_port*—A predefined global parameter that is the port of the service as specified by the service object
- Integer in the range 0–65535
- Expression—A range of port numbers; for example, 10..20
- Parameter of type port

Use a range of ports to specify port numbers that are greater than or less than a specified port number. For example:

- To set a range of ports that is greater than 10, use 11..65535.
- To set a range of ports that is less than 200, use 0..199.

Default— No value

Editing Level—Basic

Required Privilege Level

service

Required Editing Level

Basic

policies group *name* list *name* rule *name* traffic-condition *name* destination-network group-network

Syntax

```
policies group name list name rule name traffic-condition name destination-
network group-network {
    network-specifier network-specifier;
}
```

Hierarchy Level

```
[edit policies group name list name rule name traffic-
condition name destination-network group-network]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Specify the destination network to match using a network specifier. For JUNOS ASP and JUNOSe IPv6 policy rules, you must specify destination networks in the network specifier format.

Options

`network-specifier network-specifier`—(Optional) Specifies an IP address and mask.

Value— Specify the subnet in one of the following formats:

- [not] < address> /< mask> or < address> /< prefix length>
 - Include *not* to indicate that the condition matches every address that is not in the specified subnet.
 - < prefix length> is a number in the range 0–32, and specifies how many of the first bits in the address specify the network
- For JUNOS ASP policies, you must enter network in the format: < address> /< prefix length>

Default— 0.0.0.0/0.0.0.0

Editing Level—Basic

Required Privilege Level

service

Required Editing Level

Basic

policies group *name* list *name* rule *name* traffic-condition *name* destination-network network

Syntax

```
policies group name list name rule name traffic-condition name destination-
network network {
    ip-address ip-address;
    ip-mask ip-mask;
    ip-operation ip-operation;
}
```

Hierarchy Level

```
[edit policies group name list name rule name traffic-
condition name destination-network network]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Specify the destination network in IP address and mask format. You also use this statement to specify whether the software matches or does not match the IP address and mask.

Options

`ip-address ip-address`—(Optional) IP address of the source or destination network or host.

Value— One of the following:

- IP address
- Predefined global parameter:
 - `gateway_ipAddress`—IP address of the gateway as specified by the service object
 - `interface_ipAddress`—IP address of the router interface
 - `service_ipAddress`—IP address of the service as specified by the service object
 - `user_ipAddress`—IP address of the subscriber
 - `virtual_ipAddress`—Virtual portal address of the SAE that is used in redundant redirect server installations
- Expression—For NAT actions, you can enter a range of

- addresses; for example, 10.10.13.1..10.10.13.100
- Parameter of type address

Default— 0.0.0.0

Editing Level—Basic

`ip-mask ip-mask`—(Optional) IP address mask applied to the IP address.

Value— One of the following:

- IP address mask
- Predefined global parameter:
 - `interface_ipMask`—IP mask of the interface
 - `service_ipMask`—IP mask of the service as specified by the service object
 - `user_ipMask`—IP mask of the subscriber
- Parameter of type addressMask

Default— 255.255.255.255

Editing Level—Basic

`ip-operation ip-operation`—(Optional) Matches packets with an IP address and mask that either is equal or is not equal to the specified address and mask.

Value— One of the following:

- `is`—Matches the specified IP address and mask
- `is_not`—Matches any IP address and mask except the specified address and mask
- Parameter of type networkOperation

Default— `is`

Editing Level—Basic

Required Privilege Level

service

Required Editing Level

Basic

policies group *name* list *name* rule *name* traffic-condition *name* icmp-condition

Syntax

```
policies group name list name rule name traffic-condition name icmp-condition {
    protocol protocol;
    protocol-operation protocol-operation;
    ip-flags ip-flags;
    ip-flags-mask ip-flags-mask;
    fragment-offset fragment-offset;
    packet-length packet-length;
    icmp-type icmp-type;
    icmp-code icmp-code;
}
```

Hierarchy Level

```
[edit policies group name list name rule name traffic-condition name icmp-condition]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure matching conditions for the ICMP protocol.

`protocol protocol`— Protocol matched by this classifier list.

Value— One of the following:

- Predefined global parameter—Use a ? at the command line to see a list of valid protocols.
- Protocol number in the range 0–257
- For PCMM classifiers, there are two special protocol values:
 - 256 matches traffic that has any IP protocol value
 - 257 matches both TCP and UDP traffic
- String expression
- Parameter of type protocol

Default— No value

Editing Level—Basic

`protocol-operation` *protocol-operation*—(Optional) Matches packets with the protocol that is either equal or not equal to the specified protocol.

Value— One of the following:

- Predefined global parameter:
 - `is`—Matches packets that are equal to the specified protocol
 - `is_not`—Matches any packets except those that are equal to the specified protocol. If you are configuring an ICMP, IGMP, IPSec, or TCP classifier, `is_not` is not a valid option.
- Boolean expression:
 - `1`—`is`
 - `0`—`is_not`
- Parameter of type `protocolOperation`

Default— 1

Editing Level—Basic

`ip-flags` *ip-flags*—(Optional) Value of the IP flags field in the IP header.

Value— One of the following:

- 0—Reserved
- 1—Do not fragment
- 2—More fragments
- Numeric expression
- Parameter of type `ipFlags`

Default— 0

Editing Level—Basic

`ip-flags-mask` *ip-flags-mask*—(Optional) Mask that is associated with the IP flag.

Value— One of the following:

- Integer in the range 0–7
- Numeric expression
- Parameter of type `ipFlagsMask`

Default— 0

Editing Level—Basic

`fragment-offset` *fragment-offset*—(Optional) Value of the fragment offset field.

Value— One of the following:

- For JUNOSe routers:
 - 0—Equal to 0
 - 1—Equal to 1
 - 2..8191
- For JUNOS routing platforms, integer in the range 0–8191
- Numeric expression
- Parameter of type fragOffset

Default— No value

Editing Level—Basic

`packet-length` *packet-length*—(Optional) Matches on length of the packet. The length refers only to the IP packet, including the packet header, and does not include any layer 2 encapsulation overhead. This option is available only in JUNOS policy rules.

Value— One of the following:

- Number of bytes; all positive numbers and 0 are valid
- Parameter of type packetLength

Default— No value

Editing Level—Basic

`icmp-type` *icmp-type*—(Optional) Matches ICMP packet type.

Value— One of the following:

- Integer in the range 0–255 that represents an ICMP packet type supported on the router or CMTS device
- Numeric expression
- Parameter of type icmpType

Default— 255

Editing Level—Basic

`icmp-code` *icmp-code*—(Optional) Matches ICMP code

Value— One of the following:

- Integer in the range 0–255 that represents an ICMP code supported on the router or CMTS device
- Numeric expression
- Parameter of type icmpCode

Default— 255

Editing Level—Basic

Required Privilege Level

service

Required Editing Level

Basic

policies group *name* list *name* rule *name* traffic-condition *name* igmp-condition

Syntax

```
policies group name list name rule name traffic-condition name igmp-condition {
    protocol protocol;
    protocol-operation protocol-operation;
    ip-flags ip-flags;
    ip-flags-mask ip-flags-mask;
    fragment-offset fragment-offset;
    packet-length packet-length;
    igmp-type igmp-type;
}
```

Hierarchy Level

```
[edit policies group name list name rule name traffic-condition name igmp-condition]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure matching conditions for the IGMP protocol.

`protocol protocol`— Protocol matched by this classifier list.

Value— One of the following:

- Predefined global parameter—Use a ? at the command line to see a list of valid protocols.
- Protocol number in the range 0–257
- For PCMM classifiers, there are two special protocol values:
 - 256 matches traffic that has any IP protocol value
 - 257 matches both TCP and UDP traffic
- String expression
- Parameter of type protocol

Default— No value

Editing Level—Basic

`protocol-operation protocol-operation`—(Optional) Matches packets with the protocol that is either equal or not equal to the specified protocol.

Value— One of the following:

- Predefined global parameter:
 - `is`—Matches packets that are equal to the specified protocol
 - `is_not`—Matches any packets except those that are equal to the specified protocol. If you are configuring an ICMP, IGMP, IPSec, or TCP classifier, `is_not` is not a valid option.
- Boolean expression:
 - `1`—`is`
 - `0`—`is_not`
- Parameter of type `protocolOperation`

Default— 1

Editing Level—Basic

`ip-flags ip-flags`—(Optional) Value of the IP flags field in the IP header.

Value— One of the following:

- 0—Reserved
- 1—Do not fragment
- 2—More fragments
- Numeric expression
- Parameter of type `ipFlags`

Default— 0

Editing Level—Basic

`ip-flags-mask ip-flags-mask`—(Optional) Mask that is associated with the IP flag.

Value— One of the following:

- Integer in the range 0–7
- Numeric expression
- Parameter of type `ipFlagsMask`

Default— 0

Editing Level—Basic

`fragment-offset` *fragment-offset*—(Optional) Value of the fragment offset field.

Value— One of the following:

- For JUNOSe routers:
 - 0—Equal to 0
 - 1—Equal to 1
 - 2..8191
- For JUNOS routing platforms, integer in the range 0–8191
- Numeric expression
- Parameter of type fragOffset

Default— No value

Editing Level—Basic

`packet-length` *packet-length*—(Optional) Matches on length of the packet. The length refers only to the IP packet, including the packet header, and does not include any layer 2 encapsulation overhead. This option is available only in JUNOS policy rules.

Value— One of the following:

- Number of bytes; all positive numbers and 0 are valid
- Parameter of type packetLength

Default— No value

Editing Level—Basic

`igmp-type` *igmp-type*—(Optional) IGMP packets that can be filtered by IGMP packet type or message name.

Value— One of the following:

- Integer in the range 1–255
- Numeric expression
- Parameter of type igmpType

Default— 255

Editing Level—Basic

Required Privilege Level

service

Required Editing Level

Basic

policies group *name* list *name* rule *name* traffic-condition *name* ipsec-condition

Syntax

```
policies group name list name rule name traffic-condition name ipsec-condition
{
    spi spi;
    ip-flags ip-flags;
    ip-flags-mask ip-flags-mask;
    fragment-offset fragment-offset;
    packet-length packet-length;
    protocol protocol;
    protocol-operation protocol-operation;
}
```

Hierarchy Level

```
[edit policies group name list name rule name traffic-condition name ipsec-condition]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure matching conditions for the IPSec protocol.

Options

spi spi—(Optional) For IPSec classifiers, specifies the authentication header (AH) or the encapsulating security payload (ESP) security parameter index (SPI). This option appears only in JUNOS policy rules.

Value— One of the following:

- Integer in the range 0–255
- Parameter of type ipSecSpi

Default— No value

Editing Level—Basic

`ip-flags` *ip-flags*—(Optional) Value of the IP flags field in the IP header.

Value— One of the following:

- 0—Reserved
- 1—Do not fragment
- 2—More fragments
- Numeric expression
- Parameter of type `ipFlags`

Default— 0

Editing Level—Basic

`ip-flags-mask` *ip-flags-mask*—(Optional) Mask that is associated with the IP flag.

Value— One of the following:

- Integer in the range 0–7
- Numeric expression
- Parameter of type `ipFlagsMask`

Default— 0

Editing Level—Basic

`fragment-offset` *fragment-offset*—(Optional) Value of the fragment offset field.

Value— One of the following:

- For JUNOSe routers:
 - 0—Equal to 0
 - 1—Equal to 1
 - 2..8191
- For JUNOS routing platforms, integer in the range 0–8191
- Numeric expression
- Parameter of type `fragOffset`

Default— No value

Editing Level—Basic

`packet-length` *packet-length*—(Optional) Matches on length of the packet. The length refers only to the IP packet, including the packet header, and does not include any layer 2 encapsulation overhead. This option is available only in JUNOS policy rules.

Value— One of the following:

- Number of bytes; all positive numbers and 0 are valid
- Parameter of type packetLength

Default— No value

Editing Level—Basic

`protocol protocol`— Protocol matched by this classifier list.

Value— One of the following:

- Predefined global parameter—Use a ? at the command line to see a list of valid protocols.
- Protocol number in the range 0-257
- For PCMM classifiers, there are two special protocol values:
 - 256 matches traffic that has any IP protocol value
 - 257 matches both TCP and UDP traffic
- String expression
- Parameter of type protocol

Default— No value

Editing Level—Basic

`protocol-operation protocol-operation`—(Optional) Matches packets with the protocol that is either equal or not equal to the specified protocol.

Value— One of the following:

- Predefined global parameter:
 - `is`—Matches packets that are equal to the specified protocol
 - `is_not`—Matches any packets except those that are equal to the specified protocol. If you are configuring an ICMP, IGMP, IPsec, or TCP classifier, `is_not` is not a valid option.
- Boolean expression:
 - 1—`is`
 - 0—`is_not`
- Parameter of type protocolOperation

Default— 1

Editing Level—Basic

Required Privilege Level

service

Required Editing Level

Basic

policies group *name* list *name* rule *name* traffic-condition *name* parameter-protocol-condition

Syntax

```
policies group name list name rule name traffic-condition name parameter-
protocol-condition {
    protocol protocol;
    protocol-operation protocol-operation;
    tcp-flags tcp-flags;
    tcp-flags-mask tcp-flags-mask;
    spi spi;
    ip-flags ip-flags;
    ip-flags-mask ip-flags-mask;
    fragment-offset fragment-offset;
    packet-length packet-length;
}
```

Hierarchy Level

```
[edit policies group name list name rule name traffic-condition name parameter-
protocol-condition]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure protocol conditions that contain a parameter value for the protocol.

Options

`protocol protocol`—Parameter that is used to determine the protocol that this classifier matches.

Value—Parameter of type protocol. You must enter a parameter that has been created and has been committed.

Default—No value

Editing Level—Basic

`protocol-operation protocol-operation`—(Optional) Matches packets with the protocol that is either equal or not equal to the specified protocol.

Value— One of the following:

- Predefined global parameter:
 - `is`—Matches packets that are equal to the specified protocol
 - `is_not`—Matches any packets except those that are equal to the specified protocol. If you are configuring an ICMP, IGMP, IPSec, or TCP classifier, `is_not` is not a valid option.
- Boolean expression:
 - `1`—`is`
 - `0`—`is_not`
- Parameter of type `protocolOperation`

Default— 1

Editing Level—Basic

`tcp-flags` *tcp-flags*—(Optional) Value of the TCP flags field in the IP header.

Value— One of the following:

- Integer in the range 0–63
- Numeric expression
- Parameter of type `tcpFlags`

Default— 0

Editing Level—Basic

`tcp-flags-mask` *tcp-flags-mask*—(Optional) Mask associated with TCP flags.

Value— One of the following:

- Integer in the range 0–63
- Numeric expression
- Parameter of type `tcpFlagsMask`

Default— 0

Editing Level—Basic

`spi` *spi*—(Optional) For IPSec classifiers, specifies the authentication header (AH) or the encapsulating security payload (ESP) security parameter index (SPI). This option appears only in JUNOS policy rules.

Value— One of the following:

- Integer in the range 0–255
- Parameter of type ipSecSpi

Default— No value

Editing Level—Basic

`ip-flags` *ip-flags*—(Optional) Value of the IP flags field in the IP header.

Value— One of the following:

- 0—Reserved
- 1—Do not fragment
- 2—More fragments
- Numeric expression
- Parameter of type ipFlags

Default— 0

Editing Level—Basic

`ip-flags-mask` *ip-flags-mask*—(Optional) Mask that is associated with the IP flag.

Value— One of the following:

- Integer in the range 0–7
- Numeric expression
- Parameter of type ipFlagsMask

Default— 0

Editing Level—Basic

`fragment-offset` *fragment-offset*—(Optional) Value of the fragment offset field.

Value— One of the following:

- For JUNOSe routers:
 - 0—Equal to 0
 - 1—Equal to 1
 - 2..8191
- For JUNOS routing platforms, integer in the range 0–8191
- Numeric expression

- Parameter of type fragOffset

Default— No value

Editing Level—Basic

`packet-length` *packet-length*—(Optional) Matches on length of the packet. The length refers only to the IP packet, including the packet header, and does not include any layer 2 encapsulation overhead. This option is available only in JUNOS policy rules.

Value— One of the following:

- Number of bytes; all positive numbers and 0 are valid
- Parameter of type packetLength

Default— No value

Editing Level—Basic

Required Privilege Level

service

Required Editing Level

Basic

policies group *name* list *name* rule *name* traffic-condition *name* parameter-protocol-condition proto-attr

Syntax

```
policies group name list name rule name traffic-condition name parameter-
protocol-condition proto-attr {
    icmp-type icmp-type;
    icmp-code icmp-code;
    igmp-type igmp-type;
}
```

Hierarchy Level

```
[edit policies group name list name rule name traffic-condition name parameter-
protocol-condition proto-attr]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure ICMP packet type and code and IGMP type.

Options

`icmp-type icmp-type`—(Optional) ICMP packet type

Value— One of the following:

- Integer in the range 0–255 that represents an ICMP packet type supported on the router
- Numeric expression
- Parameter of type icmpType

Default— No value

Editing Level—Basic

`icmp-code icmp-code`—(Optional) ICMP code

Value— One of the following:

- Integer in the range 0–255 that represents an ICMP code supported on the router
- Numeric expression
- Parameter of type icmpCode

Default— No value

Editing Level—Basic

igmp-type igmp-type—(Optional) IGMP packets that can be filtered by IGMP packet type or message name.

Value— One of the following:

- Integer in the range 1–255
- Numeric expression
- Parameter of type igmpType

Default— 255

Editing Level—Basic

Required Privilege Level

service

Required Editing Level

Basic

policies group *name* list *name* rule *name* traffic-condition *name* parameter-protocol-condition proto-attr destination-port port

Syntax

```
policies group name list name rule name traffic-condition name parameter-protocol-condition proto-attr destination-port port {
    port-operation port-operation;
    from-port from-port;
}
```

Hierarchy Level

```
[edit policies group name list name rule name traffic-condition name parameter-protocol-condition proto-attr destination-port port]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure matching conditions for ports.

Options

`port-operation port-operation`—(Optional) Matches packets with a port that is either equal or not equal to the specified port.

Value— One of the following:

- Predefined global parameter:
 - eq—Matches packets that contain the specified port number
 - neq—Matches any packet except those that contain the specified port number
- String
- Parameter of type portOperation

Default— No value

Editing Level—Basic

`from-port` *from-port*—(Optional) Source or destination port.

Value— One of the following:

- `service_port`—A predefined global parameter that is the port of the service as specified by the service object
- Integer in the range 0–65535
- Expression—A range of port numbers; for example, 10..20
- Parameter of type port

Use a range of ports to specify port numbers that are greater than or less than a specified port number. For example:

- To set a range of ports that is greater than 10, use 11..65535.
- To set a range of ports that is less than 200, use 0..199.

Note that PCMM IO2 classifiers do not support port ranges. If you are using PCMM IO2 and you enter a range of port numbers, the software cannot translate the port, and it throws an exception.

PCMM IO3 classifiers do support port ranges.

Default— No value

Editing Level—Basic

Required Privilege Level

service

Required Editing Level

Basic

policies group *name* list *name* rule *name* traffic-condition *name* parameter-protocol-condition proto-attr source-port port

Syntax

```
policies group name list name rule name traffic-condition name parameter-protocol-condition proto-attr source-port port {
    port-operation port-operation;
    from-port from-port;
}
```

Hierarchy Level

```
[edit policies group name list name rule name traffic-condition name parameter-protocol-condition proto-attr source-port port]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure matching conditions for ports.

Options

`port-operation port-operation`—(Optional) Matches packets with a port that is either equal or not equal to the specified port.

Value— One of the following:

- Predefined global parameter:
 - eq—Matches packets that contain the specified port number
 - neq—Matches any packet except those that contain the specified port number
- String
- Parameter of type portOperation

Default— No value

Editing Level—Basic

`from-port` *from-port*—(Optional) Source or destination port.

Value— One of the following:

- `service_port`—A predefined global parameter that is the port of the service as specified by the service object
- Integer in the range 0–65535
- Expression—A range of port numbers; for example, 10..20
- Parameter of type port

Use a range of ports to specify port numbers that are greater than or less than a specified port number. For example:

- To set a range of ports that is greater than 10, use 11..65535.
- To set a range of ports that is less than 200, use 0..199.

Note that PCMM IO2 classifiers do not support port ranges. If you are using PCMM IO2 and you enter a range of port numbers, the software cannot translate the port, and it throws an exception.

PCMM IO3 classifiers do support port ranges.

Default— No value

Editing Level—Basic

Required Privilege Level

service

Required Editing Level

Basic

policies group *name* list *name* rule *name* traffic-condition *name* protocol-condition

Syntax

```
policies group name list name rule name traffic-condition name protocol-
condition {
    protocol protocol;
    protocol-operation protocol-operation;
    ip-flags ip-flags;
    ip-flags-mask ip-flags-mask;
    fragment-offset fragment-offset;
    packet-length packet-length;
}
```

Hierarchy Level

```
[edit policies group name list name rule name traffic-condition name protocol-
condition]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure protocol conditions that do not include port conditions.

`protocol protocol`— Protocol matched by this classifier list.

Value— One of the following:

- Predefined global parameter—Use a ? at the command line to see a list of valid protocols.
- Protocol number in the range 0–257
- For PCMM classifiers, there are two special protocol values:
 - 256 matches traffic that has any IP protocol value
 - 257 matches both TCP and UDP traffic
- String expression
- Parameter of type protocol

Default— No value

Editing Level—Basic

`protocol-operation protocol-operation`—(Optional) Matches packets with the protocol that is either equal or not equal to the specified protocol.

Value— One of the following:

- Predefined global parameter:
 - `is`—Matches packets that are equal to the specified protocol
 - `is_not`—Matches any packets except those that are equal to the specified protocol. If you are configuring an ICMP, IGMP, IPSec, or TCP classifier, `is_not` is not a valid option.
- Boolean expression:
 - `1`—`is`
 - `0`—`is_not`
- Parameter of type `protocolOperation`

Default— 1

Editing Level—Basic

`ip-flags ip-flags`—(Optional) Value of the IP flags field in the IP header.

Value— One of the following:

- 0—Reserved
- 1—Do not fragment
- 2—More fragments
- Numeric expression
- Parameter of type `ipFlags`

Default— 0

Editing Level—Basic

`ip-flags-mask ip-flags-mask`—(Optional) Mask that is associated with the IP flag.

Value— One of the following:

- Integer in the range 0–7
- Numeric expression
- Parameter of type `ipFlagsMask`

Default— 0

Editing Level—Basic

`fragment-offset` *fragment-offset*—(Optional) Value of the fragment offset field.

Value— One of the following:

- For JUNOSe routers:
 - 0—Equal to 0
 - 1—Equal to 1
 - 2..8191
- For JUNOS routing platforms, integer in the range 0–8191
- Numeric expression
- Parameter of type fragOffset

Default— No value

Editing Level—Basic

`packet-length` *packet-length*—(Optional) Matches on length of the packet. The length refers only to the IP packet, including the packet header, and does not include any layer 2 encapsulation overhead. This option is available only in JUNOS policy rules.

Value— One of the following:

- Number of bytes; all positive numbers and 0 are valid
- Parameter of type packetLength

Default— No value

Editing Level—Basic

Required Privilege Level

service

Required Editing Level

Basic

policies group *name* list *name* rule *name* traffic-condition *name* protocol-port-condition

Syntax

```
policies group name list name rule name traffic-condition name protocol-port-
condition {
    protocol protocol;
    protocol-operation protocol-operation;
    ip-flags ip-flags;
    ip-flags-mask ip-flags-mask;
    fragment-offset fragment-offset;
    packet-length packet-length;
}
```

Hierarchy Level

```
[edit policies group name list name rule name traffic-condition name protocol-
port-condition]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure matching conditions for protocols and ports.

`protocol protocol`— Protocol matched by this classifier list.

Value— One of the following:

- Predefined global parameter—Use a ? at the command line to see a list of valid protocols.
- Protocol number in the range 0–257
- For PCMM classifiers, there are two special protocol values:
 - 256 matches traffic that has any IP protocol value
 - 257 matches both TCP and UDP traffic
- String expression
- Parameter of type protocol

Default— No value

Editing Level—Basic

`protocol-operation` *protocol-operation*—(Optional) Matches packets with the protocol that is either equal or not equal to the specified protocol.

Value— One of the following:

- Predefined global parameter:
 - `is`—Matches packets that are equal to the specified protocol
 - `is_not`—Matches any packets except those that are equal to the specified protocol. If you are configuring an ICMP, IGMP, IPSec, or TCP classifier, `is_not` is not a valid option.
- Boolean expression:
 - `1`—`is`
 - `0`—`is_not`
- Parameter of type `protocolOperation`

Default— 1

Editing Level—Basic

`ip-flags` *ip-flags*—(Optional) Value of the IP flags field in the IP header.

Value— One of the following:

- 0—Reserved
- 1—Do not fragment
- 2—More fragments
- Numeric expression
- Parameter of type `ipFlags`

Default— 0

Editing Level—Basic

`ip-flags-mask` *ip-flags-mask*—(Optional) Mask that is associated with the IP flag.

Value— One of the following:

- Integer in the range 0–7
- Numeric expression
- Parameter of type `ipFlagsMask`

Default— 0

Editing Level—Basic

`fragment-offset` *fragment-offset*—(Optional) Value of the fragment offset field.

Value— One of the following:

- For JUNOSe routers:
 - 0—Equal to 0
 - 1—Equal to 1
 - 2..8191
- For JUNOS routing platforms, integer in the range 0–8191
- Numeric expression
- Parameter of type fragOffset

Default— No value

Editing Level—Basic

`packet-length` *packet-length*—(Optional) Matches on length of the packet. The length refers only to the IP packet, including the packet header, and does not include any layer 2 encapsulation overhead. This option is available only in JUNOS policy rules.

Value— One of the following:

- Number of bytes; all positive numbers and 0 are valid
- Parameter of type packetLength

Default— No value

Editing Level—Basic

Required Privilege Level

service

Required Editing Level

Basic

policies group *name* list *name* rule *name* traffic-condition *name* protocol-port-condition destination-port port

Syntax

```
policies group name list name rule name traffic-condition name protocol-port-
condition destination-port port {
    port-operation port-operation;
    from-port from-port;
}
```

Hierarchy Level

```
[edit policies group name list name rule name traffic-condition name protocol-
port-condition destination-port port]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure matching conditions for ports.

Options

`port-operation port-operation`—(Optional) Matches packets with a port that is either equal or not equal to the specified port.

Value— One of the following:

- Predefined global parameter:
 - eq—Matches packets that contain the specified port number
 - neq—Matches any packet except those that contain the specified port number
- String
- Parameter of type portOperation

Default— No value

Editing Level—Basic

from-port from-port—(Optional) Source or destination port.

Value— One of the following:

- *service_port*—A predefined global parameter that is the port of the service as specified by the service object
- Integer in the range 0–65535
- Expression—A range of port numbers; for example, 10..20
- Parameter of type port

Use a range of ports to specify port numbers that are greater than or less than a specified port number. For example:

- To set a range of ports that is greater than 10, use 11..65535.
- To set a range of ports that is less than 200, use 0..199.

Note that PCMM IO2 classifiers do not support port ranges. If you are using PCMM IO2 and you enter a range of port numbers, the software cannot translate the port, and it throws an exception.

PCMM IO3 classifiers do support port ranges.

Default— No value

Editing Level—Basic

Required Privilege Level

service

Required Editing Level

Basic

policies group *name* list *name* rule *name* traffic-condition *name* protocol-port-condition source-port port

Syntax

```
policies group name list name rule name traffic-condition name protocol-port-
condition source-port port {
    port-operation port-operation;
    from-port from-port;
}
```

Hierarchy Level

```
[edit policies group name list name rule name traffic-condition name protocol-
port-condition source-port port]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure matching conditions for ports.

Options

`port-operation port-operation`—(Optional) Matches packets with a port that is either equal or not equal to the specified port.

Value— One of the following:

- Predefined global parameter:
 - eq—Matches packets that contain the specified port number
 - neq—Matches any packet except those that contain the specified port number
- String
- Parameter of type portOperation

Default— No value

Editing Level—Basic

from-port from-port—(Optional) Source or destination port.

Value— One of the following:

- *service_port*—A predefined global parameter that is the port of the service as specified by the service object
- Integer in the range 0–65535
- Expression—A range of port numbers; for example, 10..20
- Parameter of type port

Use a range of ports to specify port numbers that are greater than or less than a specified port number. For example:

- To set a range of ports that is greater than 10, use 11..65535.
- To set a range of ports that is less than 200, use 0..199.

Note that PCMM IO2 classifiers do not support port ranges. If you are using PCMM IO2 and you enter a range of port numbers, the software cannot translate the port, and it throws an exception.

PCMM IO3 classifiers do support port ranges.

Default— No value

Editing Level—Basic

Required Privilege Level

service

Required Editing Level

Basic

policies group *name* list *name* rule *name* traffic-condition *name* source-network group-network

Syntax

```
policies group name list name rule name traffic-condition name source-
network group-network {
    network-specifier network-specifier;
}
```

Hierarchy Level

```
[edit policies group name list name rule name traffic-condition name source-
network group-network]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Specify the source network to match using a network specifier. For JUNOS ASP and JUNOSe IPv6 policy rules, you must specify source networks in the network specifier format.

Options

`network-specifier network-specifier`—(Optional) Specifies an IP address and mask.

Value— Specify the subnet in one of the following formats:

- [not] < address> /< mask> or < address> /< prefix length>
 - Include *not* to indicate that the condition matches every address that is not in the specified subnet.
 - < prefix length> is a number in the range 0–32, and specifies how many of the first bits in the address specify the network
- For JUNOS ASP policies, you must enter network in the format: < address> /< prefix length>

Default— 0.0.0.0/0.0.0.0

Editing Level—Basic

Required Privilege Level

service

Required Editing Level

Basic

policies group *name* list *name* rule *name* traffic-condition *name* source-network network

Syntax

```
policies group name list name rule name traffic-condition name source-
network network {
    ip-address ip-address;
    ip-mask ip-mask;
    ip-operation ip-operation;
}
```

Hierarchy Level

```
[edit policies group name list name rule name traffic-condition name source-
network network]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Specify the source network in IP address and mask format. You also use this statement to specify whether the software matches or does not match the IP address and mask.

Options

`ip-address ip-address`—(Optional) IP address of the source or destination network or host.

Value— One of the following:

- IP address
- Predefined global parameter:
 - `gateway_ipAddress`—IP address of the gateway as specified by the service object
 - `interface_ipAddress`—IP address of the router interface
 - `service_ipAddress`—IP address of the service as specified by the service object
 - `user_ipAddress`—IP address of the subscriber
 - `virtual_ipAddress`—Virtual portal address of the SAE that is used in redundant redirect server installations
- Expression—For NAT actions, you can enter a range of

- addresses; for example, 10.10.13.1..10.10.13.100
- Parameter of type address

Default— 0.0.0.0

Editing Level—Basic

`ip-mask ip-mask`—(Optional) IP address mask applied to the IP address.

Value— One of the following:

- IP address mask
- Predefined global parameter:
 - `interface_ipMask`—IP mask of the interface
 - `service_ipMask`—IP mask of the service as specified by the service object
 - `user_ipMask`—IP mask of the subscriber
- Parameter of type addressMask

Default— 255.255.255.255

Editing Level—Basic

`ip-operation ip-operation`—(Optional) Matches packets with an IP address and mask that either is equal or is not equal to the specified address and mask.

Value— One of the following:

- `is`—Matches the specified IP address and mask
- `is_not`—Matches any IP address and mask except the specified address and mask
- Parameter of type networkOperation

Default— `is`

Editing Level—Basic

Required Privilege Level

service

Required Editing Level

Basic

policies group *name* list *name* rule *name* traffic-condition *name* tcp-condition

Syntax

```
policies group name list name rule name traffic-condition name tcp-condition {
    tcp-flags tcp-flags;
    tcp-flags-mask tcp-flags-mask;
    protocol protocol;
    protocol-operation protocol-operation;
    ip-flags ip-flags;
    ip-flags-mask ip-flags-mask;
    fragment-offset fragment-offset;
    packet-length packet-length;
}
```

Hierarchy Level

```
[edit policies group name list name rule name traffic-condition name tcp-condition]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure matching conditions for the TCP protocol.

Options

`tcp-flags tcp-flags`—(Optional) Value of the TCP flags field in the IP header.

Value— One of the following:

- Integer in the range 0–63
- Numeric expression
- Parameter of type tcpFlags

Default— 0

Editing Level—Basic

`tcp-flags-mask` *tcp-flags-mask*—(Optional) Mask associated with TCP flags.

Value— One of the following:

- Integer in the range 0–63
- Numeric expression
- Parameter of type `tcpFlagsMask`

Default— 0

Editing Level—Basic

`protocol` *protocol*— Protocol matched by this classifier list.

Value— One of the following:

- Predefined global parameter—Use a ? at the command line to see a list of valid protocols.
- Protocol number in the range 0–257
- For PCMM classifiers, there are two special protocol values:
 - 256 matches traffic that has any IP protocol value
 - 257 matches both TCP and UDP traffic
- String expression
- Parameter of type `protocol`

Default— No value

Editing Level—Basic

`protocol-operation` *protocol-operation*—(Optional) Matches packets with the protocol that is either equal or not equal to the specified protocol.

Value— One of the following:

- Predefined global parameter:
 - `is`—Matches packets that are equal to the specified protocol
 - `is_not`—Matches any packets except those that are equal to the specified protocol. If you are configuring an ICMP, IGMP, IPsec, or TCP classifier, `is_not` is not a valid option.
- Boolean expression:
 - 1—`is`
 - 0—`is_not`
- Parameter of type `protocolOperation`

Default— 1

Editing Level—Basic

`ip-flags` *ip-flags*—(Optional) Value of the IP flags field in the IP header.

Value— One of the following:

- 0—Reserved
- 1—Do not fragment
- 2—More fragments
- Numeric expression
- Parameter of type ipFlags

Default— 0

Editing Level—Basic

`ip-flags-mask` *ip-flags-mask*—(Optional) Mask that is associated with the IP flag.

Value— One of the following:

- Integer in the range 0–7
- Numeric expression
- Parameter of type ipFlagsMask

Default— 0

Editing Level—Basic

`fragment-offset` *fragment-offset*—(Optional) Value of the fragment offset field.

Value— One of the following:

- For JUNOSe routers:
 - 0—Equal to 0
 - 1—Equal to 1
 - 2..8191
- For JUNOS routing platforms, integer in the range 0–8191
- Numeric expression
- Parameter of type fragOffset

Default— No value

Editing Level—Basic

`packet-length` *packet-length*—(Optional) Matches on length of the packet. The

length refers only to the IP packet, including the packet header, and does not include any layer 2 encapsulation overhead. This option is available only in JUNOS policy rules.

Value— One of the following:

- Number of bytes; all positive numbers and 0 are valid
- Parameter of type packetLength

Default— No value

Editing Level—Basic

Required Privilege Level

service

Required Editing Level

Basic

policies group *name* list *name* rule *name* traffic-condition *name* tcp-condition destination-port port

Syntax

```
policies group name list name rule name traffic-condition name tcp-
condition destination-port port {
    port-operation port-operation;
    from-port from-port;
}
```

Hierarchy Level

```
[edit policies group name list name rule name traffic-condition name tcp-
condition destination-port port]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure matching conditions for ports.

Options

`port-operation port-operation`—(Optional) Matches packets with a port that is either equal or not equal to the specified port.

Value— One of the following:

- Predefined global parameter:
 - eq—Matches packets that contain the specified port number
 - neq—Matches any packet except those that contain the specified port number
- String
- Parameter of type portOperation

Default— No value

Editing Level—Basic

from-port from-port—(Optional) Source or destination port.

Value— One of the following:

- *service_port*—A predefined global parameter that is the port of the service as specified by the service object
- Integer in the range 0–65535
- Expression—A range of port numbers; for example, 10..20
- Parameter of type port

Use a range of ports to specify port numbers that are greater than or less than a specified port number. For example:

- To set a range of ports that is greater than 10, use 11..65535.
- To set a range of ports that is less than 200, use 0..199.

Note that PCMM IO2 classifiers do not support port ranges. If you are using PCMM IO2 and you enter a range of port numbers, the software cannot translate the port, and it throws an exception.

PCMM IO3 classifiers do support port ranges.

Default— No value

Editing Level—Basic

Required Privilege Level

service

Required Editing Level

Basic

policies group *name* list *name* rule *name* traffic-condition *name* tcp-condition source-port port

Syntax

```
policies group name list name rule name traffic-condition name tcp-
condition source-port port {
    port-operation port-operation;
    from-port from-port;
}
```

Hierarchy Level

```
[edit policies group name list name rule name traffic-condition name tcp-
condition source-port port]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure matching conditions for ports.

Options

`port-operation port-operation`—(Optional) Matches packets with a port that is either equal or not equal to the specified port.

Value— One of the following:

- Predefined global parameter:
 - eq—Matches packets that contain the specified port number
 - neq—Matches any packet except those that contain the specified port number
- String
- Parameter of type portOperation

Default— No value

Editing Level—Basic

from-port from-port—(Optional) Source or destination port.

Value— One of the following:

- *service_port*—A predefined global parameter that is the port of the service as specified by the service object
- Integer in the range 0–65535
- Expression—A range of port numbers; for example, 10..20
- Parameter of type port

Use a range of ports to specify port numbers that are greater than or less than a specified port number. For example:

- To set a range of ports that is greater than 10, use 11..65535.
- To set a range of ports that is less than 200, use 0..199.

Note that PCMM IO2 classifiers do not support port ranges. If you are using PCMM IO2 and you enter a range of port numbers, the software cannot translate the port, and it throws an exception.

PCMM IO3 classifiers do support port ranges.

Default— No value

Editing Level—Basic

Required Privilege Level

service

Required Editing Level

Basic

policies group *name* list *name* rule *name* traffic-condition *name* tos

Syntax

```
policies group name list name rule name traffic-condition name tos {
    tos-byte tos-byte;
    tos-byte-mask tos-byte-mask;
}
```

Hierarchy Level

```
[edit policies group name list name rule name traffic-condition name tos]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Define a particular traffic flow to the service's network for the DA IP field in the IP packet. The CoS feature on JUNOS routing platforms supports DiffServ as well as six-bit IP header ToS byte settings. The DiffServ protocol uses the ToS byte in the IP header. The most significant six bits of this byte form the Differentiated Services code point (DSCP). The CoS feature uses DSCPs to determine the forwarding class associated with each packet. It also uses the ToS byte and ToS byte mask to determine IP precedence.

`tos-byte tos-byte`—(Optional) Matches the value of the ToS byte in the IP packet header.

Value— One of the following:

- Integer in the range 0–255; uses whole 8 bits of the ToS byte
- Numeric expression
- Parameter of type `tosByte`

Default— 0

Editing Level—Basic

`tos-byte-mask tos-byte-mask`—(Optional) Mask associated with the ToS byte.

Value— One of the following:

- Integer in the range 0–255 for JUNOSE; values of 224, 252 for JUNOS
- Numeric expression
- Parameter of type tosByteMask

Default— 0

Editing Level—Basic

Required Privilege Level

service

Required Editing Level

Basic

policies group *name* list *name* rule *name* traffic-condition *name* traffic-match-condition

Syntax

```
policies group name list name rule name traffic-condition name traffic-match-
condition {
    forwarding-class forwarding-class;
    interface-group interface-group;
    source-class source-class;
    destination-class destination-class;
    allow-ip-options allow-ip-options;
    traffic-class traffic-class;
    color color;
    user-packet-class user-packet-class;
    destination-local-interface destination-local-interface;
}
```

Hierarchy Level

```
[edit policies group name list name rule name traffic-condition name traffic-
match-condition]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure conditions for JUNOS filter policy rules.

Options

`forwarding-class forwarding-class`—(Optional) Matches packets based on the name of a forwarding class

Value— One of the following:

- String expression that matches a forwarding class on the router; for example, "assured-forwarding," "best-effort," "expedited-forwarding," or "network-control"
- Parameter of type forwardingClass
- Predefined runtime parameter: fc_assured, fc_besteffort, fc_expedited

Default— No value

Editing Level—Basic

`interface-group` *interface-group*—(Optional) Matches packets based on the interface group on which the packet was received.

Value— One of the following:

- Integer in the range 0–4294967295
- Numeric expression
- Parameter of type `interfaceGroup`

Default— No value

Editing Level—Basic

`source-class` *source-class*—(Optional) Matches packets based on source class. A source class is a set of source prefixes grouped together and given a class name. You would usually match source and destination classes for output firewall filters. Note that you cannot match on both source class and destination class at the same time. You must choose one or the other.

Value— One of the following:

- String expression that matches a source class that is configured on the router; for example, "gold-class"
- Parameter of type `trafficClassSpec`

Default— No value

Editing Level—Basic

`destination-class` *destination-class*—(Optional) Matches packets based on destination class. A destination class is a set of destination prefixes grouped together and given a class name. You would usually match source and destination classes for output firewall filters. Note that you cannot match on both source class and destination class at the same time. You must choose one or the other.

Value— One of the following:

- String expression that matches a source class that is configured on the router; for example, "gold-class"
- Parameter of type `trafficClassSpec`

Default— No value

Editing Level—Basic

`allow-ip-options` *allow-ip-options*—(Optional) Matches on IP options.

Value— One of the following:

- Numeric value of the IP option
- String expression that matches a text synonym of an IP option on the router; for example, "loose-source-route," "record-route," "router-alert," "strict-source-route," or "timestamp"
- Parameter of type `allowIpOptions`

Default— No value

Editing Level—Basic

`traffic-class` *traffic-class*—(Optional) Matches packets based on traffic class for JUNOSe policy rules.

Value—Text

Default— No value

Editing Level—Basic

`color` *color*—(Optional) Matches packets based on packet color for JUNOSe policy rules.

Value— One of the following:

- Integer in the range 1–3
 - 1—green
 - 2—yellow
 - 3—red
- Parameter of type `color`

Default— No value

Editing Level—Basic

`user-packet-class` *user-packet-class*—(Optional) Matches packets based on the user packet class action number.

Value— One of the following:

- Integer in the range 0–15
- Parameter of type userPacketClass

Default— No value

Editing Level—Basic

destination-local-interface destination-local-interface—(Optional)

Matches packets based on whether the destination interface is local.

Value—Text

Default— No value

Editing Level—Basic

Required Privilege Level

service

Required Editing Level

Basic

policies group *name* list *name* rule *name* traffic-mirror

Syntax

```
policies group name list name rule name traffic-mirror name {
    description description;
}
```

Hierarchy Level

```
[edit policies group name list name rule name traffic-mirror]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure a traffic-mirror action. Use this action to mirror traffic from a destination to a source or from a source to a destination. You can configure traffic-mirror actions for JUNOS input policy rules.

Before you use traffic-mirror actions, you must configure forwarding options on JUNOS routing platforms for port mirroring and next-hop group. For information about these features, see the *JUNOS Policy Framework Configuration Guide*.

The policy rule that contains a traffic-mirror action must comply with these conditions:

- It must be combined with forward actions in the same rule. One of the forward actions must accept the traffic if the source and/or destination IP addresses do not match the conditions.
- It contains either no classify-traffic condition or only one classify-traffic condition.
- It can be marked for accounting.

Options

`name name`— Name of the traffic-mirror action.

Value— Text

`description description`—(Optional) Description of the object that you are configuring.

Value—Text

Default— No value

Editing Level—Basic

Required Privilege Level

service

Required Editing Level

Basic

policies group *name* list *name* rule *name* traffic-shape

Syntax

```
policies group name list name rule name traffic-shape name {
    rate rate;
    description description;
}
```

Hierarchy Level

```
[edit policies group name list name rule name traffic-shape]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure a traffic-shape action. Traffic-shape actions specify the maximum rate of traffic transmitted on an interface. You can create traffic-shape actions in JUNOS shaping policy rules.

Options

`name name`— Name of the traffic-shape action.

Value— Text

`rate rate`—(Optional) Maximum transmission rate.

Value— One of the following:

- Predefined global parameter `interface_speed`—Speed of the subscriber's router interface
- Bits per second in the range 1000–32000000000
- Numeric expression
- Parameter of type `rate`

Default— No value

Editing Level—Basic

`description` *description*—(Optional) Description of the object that you are configuring.

Value—Text

Default— No value

Editing Level—Basic

Required Privilege Level

service

Required Editing Level

Basic

policies group *name* list *name* rule *name* user-packet-class

Syntax

```
policies group name list name rule name user-packet-class name {
    user-packet-class user-packet-class;
    description description;
}
```

Hierarchy Level

```
[edit policies group name list name rule name user-packet-class]
```

Release Information

Statement introduced in SRC Release 2.0.0

Description

Configure a user packet class action. Use this action to put packets in a particular user packet class. You can configure user packet class actions for JUNOS policy rules.

Options

`name name`— Name for the user packet class action.

Value— Text

`user-packet-class user-packet-class`—(Optional) User packet class that is applied to a packet when it passes through the router.

Value— One of the following:

- Integer in the range 0–15
- Parameter of type `userPacketClass`

Default— No value

Editing Level—Basic

`description description`—(Optional) Description of the object that you are configuring.

Value—Text

Default— No value

Editing Level—Basic

Required Privilege Level

service

Required Editing Level

Basic

policies group *name* local-parameters

Syntax

```
policies group name local-parameters name {
    description description;
    default-value default-value;
    type type;
}
```

Hierarchy Level

```
[edit policies group name local-parameters]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Define a local parameter. Local parameters are available only for the policy group in which the parameter is defined.

Options

`name name`— Name of the parameter

Value— Text

`description description`—(Optional) Description of the object that you are configuring.

Value— Text

Default— No value

Editing Level—Basic

`default-value default-value`—(Optional) Value that the policy engine uses if no other values are provided during the parameter value acquisition process. If other values are provided to the policy engine but problems are encountered, the default value for the parameter is not used. The policy engine generates an error message.

Value— Valid value for the parameter type. See the policy

documentation in the *SRC-PE Services and Policies Guide* for valid values for each parameter type.

Default— No value

Editing Level—Basic

type type—(Optional) Type of attribute for which you can use the parameter. The parameter type determines where you can use the parameter.

Value— See the policy documentation in the *SRC-PE Services and Policies Guide* for a list of parameter types, where each type of parameter is used, and what each parameter is used to specify.

Default— No value

Editing Level—Basic

Required Privilege Level

service

Required Editing Level

Basic

Subscriber CLI

The following table summarizes the SRC command-line interface (SRC CLI) for configuring subscribers. Configuration statements are listed in alphabetical order.

Subscriber CLI Configuration Statements
<u>subscribers retailer</u>
<u>subscribers retailer name info</u>
<u>subscribers retailer name manager</u>
<u>subscribers retailer name schedule</u>
<u>subscribers retailer name schedule name event</u>
<u>subscribers retailer name schedule name event name action</u>
<u>subscribers retailer name schedule name event name action name attribute</u>
<u>subscribers retailer name schedule name event name except</u>
<u>subscribers retailer name schedule name event name except name from</u>
<u>subscribers retailer name schedule name event name except name to</u>
<u>subscribers retailer name schedule name event name from</u>
<u>subscribers retailer name schedule name event name to</u>
<u>subscribers retailer name subscriber-folder</u>
<u>subscribers retailer name subscriber-folder folder-name device</u>
<u>subscribers retailer name subscriber-folder folder-name device device-name manager</u>
<u>subscribers retailer name subscriber-folder folder-name device device-name schedule</u>
<u>subscribers retailer name subscriber-folder folder-name device device-name schedule name event</u>
<u>subscribers retailer name subscriber-folder folder-name device device-name schedule name event name action</u>
<u>subscribers retailer name subscriber-folder folder-name device device-name schedule name event name action name attribute</u>

<u>subscribers retailer name subscriber-folder folder-name device device-name schedule name event name except</u>
<u>subscribers retailer name subscriber-folder folder-name device device-name schedule name event name except name from</u>
<u>subscribers retailer name subscriber-folder folder-name device device-name schedule name event name except name to</u>
<u>subscribers retailer name subscriber-folder folder-name device device-name schedule name event name from</u>
<u>subscribers retailer name subscriber-folder folder-name device device-name schedule name event name to</u>
<u>subscribers retailer name subscriber-folder folder-name device device-name subscription</u>
<u>subscribers retailer name subscriber-folder folder-name enterprise</u>
<u>subscribers retailer name subscriber-folder folder-name enterprise name access</u>
<u>subscribers retailer name subscriber-folder folder-name enterprise name access name admission-control</u>
<u>subscribers retailer name subscriber-folder folder-name enterprise name access name manager</u>
<u>subscribers retailer name subscriber-folder folder-name enterprise name access name schedule</u>
<u>subscribers retailer name subscriber-folder folder-name enterprise name access name schedule name event</u>
<u>subscribers retailer name subscriber-folder folder-name enterprise name access name schedule name event name action</u>
<u>subscribers retailer name subscriber-folder folder-name enterprise name access name schedule name event name action name attribute</u>
<u>subscribers retailer name subscriber-folder folder-name enterprise name access name schedule name event name except</u>
<u>subscribers retailer name subscriber-folder folder-name enterprise name access name schedule name event name except name from</u>
<u>subscribers retailer name subscriber-folder folder-name enterprise name access name schedule name event name except name to</u>
<u>subscribers retailer name subscriber-folder folder-name enterprise name access name schedule name event name from</u>

subscribers retailer name subscriber-folder folder-name enterprise name access name schedule name event name to

subscribers retailer name subscriber-folder folder-name enterprise name access name subscription

subscribers retailer name subscriber-folder folder-name enterprise name device

subscribers retailer name subscriber-folder folder-name enterprise name device device-name manager

subscribers retailer name subscriber-folder folder-name enterprise name device device-name schedule

subscribers retailer name subscriber-folder folder-name enterprise name device device-name schedule name event

subscribers retailer name subscriber-folder folder-name enterprise name device device-name schedule name event name action

subscribers retailer name subscriber-folder folder-name enterprise name device device-name schedule name event name action name attribute

subscribers retailer name subscriber-folder folder-name enterprise name device device-name schedule name event name except

subscribers retailer name subscriber-folder folder-name enterprise name device device-name schedule name event name except name from

subscribers retailer name subscriber-folder folder-name enterprise name device device-name schedule name event name except name to

subscribers retailer name subscriber-folder folder-name enterprise name device device-name schedule name event name from

subscribers retailer name subscriber-folder folder-name enterprise name device device-name schedule name event name to

subscribers retailer name subscriber-folder folder-name enterprise name device device-name subscription

subscribers retailer name subscriber-folder folder-name enterprise name info

subscribers retailer name subscriber-folder folder-name enterprise name manager

subscribers retailer name subscriber-folder folder-name enterprise name schedule

subscribers retailer name subscriber-folder folder-name enterprise name schedule name event

subscribers retailer name subscriber-folder folder-name enterprise name schedule name event name action

<u>subscribers retailer name subscriber-folder folder-name enterprise name schedule name event name action name attribute</u>
<u>subscribers retailer name subscriber-folder folder-name enterprise name schedule name event name except</u>
<u>subscribers retailer name subscriber-folder folder-name enterprise name schedule name event name except name from</u>
<u>subscribers retailer name subscriber-folder folder-name enterprise name schedule name event name except name to</u>
<u>subscribers retailer name subscriber-folder folder-name enterprise name schedule name event name from</u>
<u>subscribers retailer name subscriber-folder folder-name enterprise name schedule name event name to</u>
<u>subscribers retailer name subscriber-folder folder-name enterprise name site</u>
<u>subscribers retailer name subscriber-folder folder-name enterprise name site name access</u>
<u>subscribers retailer name subscriber-folder folder-name enterprise name site name access name admission-control</u>
<u>subscribers retailer name subscriber-folder folder-name enterprise name site name access name manager</u>
<u>subscribers retailer name subscriber-folder folder-name enterprise name site name access name schedule</u>
<u>subscribers retailer name subscriber-folder folder-name enterprise name site name access name schedule name event</u>
<u>subscribers retailer name subscriber-folder folder-name enterprise name site name access name schedule name event name action</u>
<u>subscribers retailer name subscriber-folder folder-name enterprise name site name access name schedule name event name action name attribute</u>
<u>subscribers retailer name subscriber-folder folder-name enterprise name site name access name schedule name event name except</u>
<u>subscribers retailer name subscriber-folder folder-name enterprise name site name access name schedule name event name except name from</u>
<u>subscribers retailer name subscriber-folder folder-name enterprise name site name access name schedule name event name except name to</u>
<u>subscribers retailer name subscriber-folder folder-name enterprise name site name access name schedule name event name from</u>

<u>subscribers retailer name subscriber-folder folder-name enterprise name site name access name schedule name event name to</u>
<u>subscribers retailer name subscriber-folder folder-name enterprise name site name access name subscription</u>
<u>subscribers retailer name subscriber-folder folder-name enterprise name site name device</u>
<u>subscribers retailer name subscriber-folder folder-name enterprise name site name device device-name manager</u>
<u>subscribers retailer name subscriber-folder folder-name enterprise name site name device device-name schedule</u>
<u>subscribers retailer name subscriber-folder folder-name enterprise name site name device device-name schedule name event</u>
<u>subscribers retailer name subscriber-folder folder-name enterprise name site name device device-name schedule name event name action</u>
<u>subscribers retailer name subscriber-folder folder-name enterprise name site name device device-name schedule name event name action name attribute</u>
<u>subscribers retailer name subscriber-folder folder-name enterprise name site name device device-name schedule name event name except</u>
<u>subscribers retailer name subscriber-folder folder-name enterprise name site name device device-name schedule name event name except name from</u>
<u>subscribers retailer name subscriber-folder folder-name enterprise name site name device device-name schedule name event name except name to</u>
<u>subscribers retailer name subscriber-folder folder-name enterprise name site name device device-name schedule name event name from</u>
<u>subscribers retailer name subscriber-folder folder-name enterprise name site name device device-name schedule name event name to</u>
<u>subscribers retailer name subscriber-folder folder-name enterprise name site name device device-name subscription</u>
<u>subscribers retailer name subscriber-folder folder-name enterprise name site name manager</u>
<u>subscribers retailer name subscriber-folder folder-name enterprise name site name schedule</u>
<u>subscribers retailer name subscriber-folder folder-name enterprise name site name schedule name event</u>
<u>subscribers retailer name subscriber-folder folder-name enterprise name site name schedule name event name action</u>

<u>subscribers retailer name subscriber-folder folder-name enterprise name site name schedule name event name action name attribute</u>
<u>subscribers retailer name subscriber-folder folder-name enterprise name site name schedule name event name except</u>
<u>subscribers retailer name subscriber-folder folder-name enterprise name site name schedule name event name except name from</u>
<u>subscribers retailer name subscriber-folder folder-name enterprise name site name schedule name event name except name to</u>
<u>subscribers retailer name subscriber-folder folder-name enterprise name site name schedule name event name from</u>
<u>subscribers retailer name subscriber-folder folder-name enterprise name site name schedule name event name to</u>
<u>subscribers retailer name subscriber-folder folder-name enterprise name site name subscription</u>
<u>subscribers retailer name subscriber-folder folder-name enterprise name subscription</u>
<u>subscribers retailer name subscriber-folder folder-name enterprise name vpn</u>
<u>subscribers retailer name subscriber-folder folder-name manager</u>
<u>subscribers retailer name subscriber-folder folder-name schedule</u>
<u>subscribers retailer name subscriber-folder folder-name schedule name event</u>
<u>subscribers retailer name subscriber-folder folder-name schedule name event name action</u>
<u>subscribers retailer name subscriber-folder folder-name schedule name event name action name attribute</u>
<u>subscribers retailer name subscriber-folder folder-name schedule name event name except</u>
<u>subscribers retailer name subscriber-folder folder-name schedule name event name except name from</u>
<u>subscribers retailer name subscriber-folder folder-name schedule name event name except name to</u>
<u>subscribers retailer name subscriber-folder folder-name schedule name event name from</u>
<u>subscribers retailer name subscriber-folder folder-name schedule name event name to</u>
<u>subscribers retailer name subscriber-folder folder-name subscriber</u>
<u>subscribers retailer name subscriber-folder folder-name subscriber name admission-control</u>
<u>subscribers retailer name subscriber-folder folder-name subscriber name info</u>

<u>subscribers retailer name subscriber-folder folder-name subscriber name schedule</u>
<u>subscribers retailer name subscriber-folder folder-name subscriber name schedule name event</u>
<u>subscribers retailer name subscriber-folder folder-name subscriber name schedule name event name action</u>
<u>subscribers retailer name subscriber-folder folder-name subscriber name schedule name event name action name attribute</u>
<u>subscribers retailer name subscriber-folder folder-name subscriber name schedule name event name except</u>
<u>subscribers retailer name subscriber-folder folder-name subscriber name schedule name event name except name from</u>
<u>subscribers retailer name subscriber-folder folder-name subscriber name schedule name event name except name to</u>
<u>subscribers retailer name subscriber-folder folder-name subscriber name schedule name event name from</u>
<u>subscribers retailer name subscriber-folder folder-name subscriber name schedule name event name to</u>
<u>subscribers retailer name subscriber-folder folder-name subscriber name subscription</u>
<u>subscribers retailer name subscriber-folder folder-name subscription</u>
<u>subscribers retailer name subscription</u>
<u>subscribers retailer name vpn</u>

subscribers retailer

Syntax

```
subscribers retailer name {
    domain-name [domain-name...];
    authentication-plug-in [authentication-plug-in...];
    dhcp-authentication-plug-in [dhcp-authentication-plug-in...];
    tracking-plug-in [tracking-plug-in...];
    maximum-login maximum-login;
    session-timeout session-timeout;
    scope [scope...];
    imported-extranet [imported-extranet...];
    substitution [substitution...];
}
```

Hierarchy Level

```
[edit subscribers retailer]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure a retailer subscriber.

Options

name name— Name of the retailer.

Value— Text

domain-name [domain-name...]— Domain names associated with the retailer.

Value— Domain name in the format `domainName.domainExtension`.
For example: `virneo.com`.

Default— No value

Editing Level—Basic

authentication-plug-in [authentication-plug-in...]—(Optional) Single

authentication plug-in or a list of plug-ins used to authenticate subscribers who log in to the domains specified for this retailer. If you do not specify a plug-in for the retailer, the SAE uses the default retailer authentication plug-in.

Value— Single authentication plug-in or a list of plug-ins

Default— No value

Editing Level—Basic

`dhcp-authentication-plug-in [dhcp-authentication-plug-in...]`—(Optional) Single authentication plug-in or a list of plug-ins used to authenticate DHCP address requests for subscribers who log in to the domains specified for this retailer. If you do not specify a plug-in for the retailer, the SAE uses the default retailer DHCP authentication plug-in.

Value— Single authentication plug-in or a list of plug-ins

Default— No value

Editing Level—Basic

`tracking-plug-in [tracking-plug-in...]`—(Optional) Single tracking plug-in or a list of tracking plug-ins used to track subscriber sessions associated with this retailer. If you do not specify a plug-in for the retailer, the SAE uses the global subscriber tracking plug-in.

Value— Single tracking plug-in or a list of tracking plug-ins

Default— No value

Editing Level—Basic

`maximum-login maximum-login`—(Optional) Maximum number of concurrent logins for subscribers associated with this object. By default, all subordinate objects use this value. However, if you specify this value for a subordinate object, that object and its subordinate objects will use the subordinate's value.

Value— Integer in the range 0–2147483647

Default— No value

Editing Level—Basic

`session-timeout session-timeout`—(Optional) Timeout for subscriber sessions. By default, all subordinate objects use this value. However, if you specify this value for a subordinate object, that object and its subordinate objects will use the subordinate's value.

Value— Number of seconds in the range 0–2147483647

Default— No value

Editing Level—Basic

`scope [scope...]`—(Optional) Service scope(s) assigned to subscribers. By default, this

value is inherited from parent objects. However, if you specify a value here, it overrides the default for this subscriber and all subordinate objects.

Value— Single service or a list of scopes

Default— No value

Editing Level—Basic

`imported-extranet [imported-extranet...]`—(Optional) Extranet exported by another retailer or enterprise.

Value— DN of the extranet

Default— No value

Editing Level—Basic

`substitution [substitution...]`—(Optional) Actual values for parameters associated with this object. The policy engine substitutes parameters in policies associated with this object with the values that you specify in the substitution configuration.

Value— Substitution in the form `< parameter name> = < value>` . For example, `bandwidth= 1000000`.

Default— No value

Editing Level—Basic

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* info

Syntax

```
subscribers retailer name info {
    contact contact;
    e-mail e-mail;
    url url;
}
```

Hierarchy Level

```
[edit subscribers retailer name info]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure contact information for the retailer.

Options

`contact contact`—(Optional) Name of the contact person at the retailer.

Value— Text

Default— No value

Editing Level—Basic

`e-mail e-mail`—(Optional) E-mail address of the contact person at the retailer.

Value— E-mail address

Default— No value

Editing Level—Basic

`url url`—(Optional) URL of the retailer.

Value— URL

Default— No value

Editing Level—Basic

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* manager

Syntax

```
subscribers retailer name manager name {
    role [(administrator | subscription | substitution | activation |
vpn)...];
    encrypted-password encrypted-password;
    plain-text-password;
    description description;
}
```

Hierarchy Level

```
[edit subscribers retailer name manager]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure a manager account.

Options

`name name`— Name of the manager account.

Value— Text

`role [(administrator | subscription | substitution | activation | vpn) . . .]`— Privilege level of the enterprise manager account. If you do not specify a privilege level, the manager has read-only access to associated objects.

Value

- `administrator`— Administrators have all privileges of the subscription, substitution, activation, and vpn roles. Additionally, administrators can create, delete, and modify other enterprise manager objects.
- `subscription`— Subscription managers can create, delete, modify, activate, and deactivate subscriptions.
- `substitution`— Substitution managers can modify policy parameters provided by subscriptions, enterprises, sites, and

- accesses.
- `activation`— Activation managers can activate and deactivate subscriptions.
- `vpn`— VPN managers can modify, export, and cancel the export of VPNs.

Default— No value

Editing Level—Basic

`encrypted-password` *encrypted-password*—(Optional) Login password and type of encryption.

Value— Enter a password, and select an encryption method that your directory supports.

- `crypt`—Style is `/etc/passwd`
- `sha`—Secure hash algorithm
- `md5`—Message digest #5

Default— No value

Editing Level—Basic

`plain-text-password`—(Optional) Plain text password. The password is encrypted using the algorithm defined in `system services editor password-encryption`.

Value— Text

Default— No value

Editing Level—Basic

`description` *description*—(Optional) Description of the object that you are configuring.

Value— Text

Default— No value

Editing Level—Basic

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* schedule

Syntax

```
subscribers retailer name schedule name {  
    description description;  
}
```

Hierarchy Level

```
[edit subscribers retailer name schedule]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure a service schedule.

Options

name name— Name of service schedule.

Value—Text

description description—(Optional) Description of the service schedule.

Value—Text

Default— No value

Editing Level—Basic

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* schedule *name* event

Syntax

```
subscribers retailer name schedule name event name ...
```

Hierarchy Level

```
[edit subscribers retailer name schedule name event]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure a scheduling event.

Options

`name name`— Name of the scheduling event.

Value—Text

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* schedule *name* event *name* action

Syntax

```
subscribers retailer name schedule name event name action name {
    type (activate | deactivate | deny | deny-deactivate);
    service service;
    substitution [substitution...];
}
```

Hierarchy Level

```
[edit subscribers retailer name schedule name event name action]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure actions to perform for the scheduled event.

Options

`name name`— Arbitrary identifier for action.

Value—Text

`type (activate | deactivate | deny | deny-deactivate)`— Type of action.

Value

- `activate`— Activate service at the time specified in the entry schedule.
- `deactivate`— Deactivate service at the time specified in the entry schedule.
- `deny`— Deny new activation requests during the time specified in the entry schedule; current sessions are not affected. This value applies only to services that have an authorization plugin configured.
- `deny-deactivate`— Deny new activation requests during the time specified in the entry schedule; current sessions are deactivated at the specified time. This value applies only to

services that have an authorization plug-in configured.

Default— No value

Editing Level—Basic

`service service`— Name of service affected by this action.

Value—Text

Default— No value

Editing Level—Basic

`substitution [substitution...]`—(Optional) Substitutions to be used when activating the service. Substitutions apply only to service activations.

Value— An entry in valid substitution format. See the *SRC-PE Services and Policies Guide*.

Default— No value

Editing Level—Basic

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* schedule *name* event *name* action *name* attribute

Syntax

```
subscribers retailer name schedule name event name action name attribute (sessionName |
sessionTag | sessionTimeout | downStreamBandwidth | upStreamBandwidth) {
    value;
}
```

Hierarchy Level

```
[edit subscribers retailer name schedule name event name action name attribute]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure subscription attributes. Subscription attributes apply only to service activations.

Options

Value

- *sessionName*— Name of the service session.
- *sessionTag*— Tag that can be used for accounting purposes.
- *sessionTimeout*— Session timeout to be used when the service is activated. The service session is deactivated when this timeout expires.
- *downStreamBandwidth*— Attribute used by SRC Admission Control Plug-In (SRC-ACP) to specify the rate of traffic between the network and the subscriber.
- *upStreamBandwidth*— Attribute used by SRC-ACP to specify the rate of traffic between the subscriber and the network.

value— Value of the specified subscription attribute.

Value— Depends on the specified subscription attribute

Default— No value

Editing Level—Basic

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* schedule *name* event *name* except

Syntax

```
subscribers retailer name schedule name event name except name ...
```

Hierarchy Level

```
[edit subscribers retailer name schedule name event name except]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure an exclusion for the event.

Options

name name—Arbitrary identifier for exclusion rule.

Value—Text

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* schedule *name* event *name* except *name* from

Syntax

```
subscribers retailer name schedule name event name except name from {
    hour hour;
    minute minute;
    day-of-month day-of-month;
    day-of-week day-of-week;
    month month;
    year year;
    time-zone time-zone;
}
```

Hierarchy Level

```
[edit subscribers retailer name schedule name event name except name from]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure the start time of the exclusion. For guidelines about entering time values, see the *SRC-PE Services and Policies Guide*.

Options

`hour hour`—(Optional) Hour of the day in the indicated month in which to schedule the event or exclusion.

Value— 0-23
Default— *
Editing Level—Basic

`minute minute`—(Optional) Minutes past the indicated hour in which to schedule the event or exclusion.

Value— 0-59
Default— *
Editing Level—Basic

`day-of-month day-of-month`—(Optional) Day of the month in which to schedule the event or exclusion. If you specify both `day-of-month` and `day-of-week`, `day-of-month` is used.

Value— 1-31

Default— *
Editing Level—Basic

day-of-week *day-of-week*—(Optional) Day of the week in which to schedule the event or exclusion. If you specify both *day-of-month* and *day-of-week*, *day-of-month* is used.

Value— 0-6, with 0 representing Sunday and each subsequent number representing the next day of the week
Default— *
Editing Level—Basic

month *month*—(Optional) Month of the year in which to schedule the event or exclusion.

Value— 1-12
Default— *
Editing Level—Basic

year *year*—(Optional) Year in which to schedule the event or exclusion.

Value— Four integers that indicate the year
Default— *
Editing Level—Basic

time-zone *time-zone*—(Optional) Name of the time zone to use in the schedule.

Value— One of the following values:

- *—Local time zone of the SAE
- An offset to GMT in the format: GMT (+ | -) (*hh:mm* | *hh mm* | *hh*)
 - *hh*—Hour of the day in the range of 0-23
 - *mm*—Minutes past the hour in the range of 0-59

Default— *
Editing Level—Basic

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* schedule *name* event *name* except *name* to

Syntax

```
subscribers retailer name schedule name event name except name to {
    hour hour;
    minute minute;
    day-of-month day-of-month;
    day-of-week day-of-week;
    month month;
    year year;
    time-zone time-zone;
}
```

Hierarchy Level

```
[edit subscribers retailer name schedule name event name except name to]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure the end time of the exclusion. For guidelines about entering time values, see the *SRC-PE Services and Policies Guide*.

These values apply only to services that have an authorization plug-in configured. If an authorization plug-in is not configured for the service associated with the schedule, these values are ignored.

Options

hour *hour*—(Optional) Hour of the day in the indicated month in which to schedule the event or exclusion.

Value— 0-23

Default— *

Editing Level—Basic

minute *minute*—(Optional) Minutes past the indicated hour in which to schedule the event or exclusion.

Value— 0-59

Default— *

Editing Level—Basic

`day-of-month` *day-of-month*—(Optional) Day of the month in which to schedule the event or exclusion. If you specify both `day-of-month` and `day-of-week`, `day-of-month` is used.

Value— 1-31

Default— *

Editing Level—Basic

`day-of-week` *day-of-week*—(Optional) Day of the week in which to schedule the event or exclusion. If you specify both `day-of-month` and `day-of-week`, `day-of-month` is used.

Value— 0-6, with 0 representing Sunday and each subsequent number representing the next day of the week

Default— *

Editing Level—Basic

`month` *month*—(Optional) Month of the year in which to schedule the event or exclusion.

Value— 1-12

Default— *

Editing Level—Basic

`year` *year*—(Optional) Year in which to schedule the event or exclusion.

Value— Four integers that indicate the year

Default— *

Editing Level—Basic

`time-zone` *time-zone*—(Optional) Name of the time zone to use in the schedule.

Value— One of the following values:

- *—Local time zone of the SAE
- An offset to GMT in the format: GMT (+ | -) (*hh:mm* | *hh mm* | *hh*)
 - *hh*—Hour of the day in the range of 0-23
 - *mm*—Minutes past the hour in the range of 0-59

Default— *

Editing Level—Basic

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* schedule *name* event *name* from

Syntax

```
subscribers retailer name schedule name event name from {
    effective effective;
    hour hour;
    minute minute;
    day-of-month day-of-month;
    day-of-week day-of-week;
    month month;
    year year;
    time-zone time-zone;
}
```

Hierarchy Level

```
[edit subscribers retailer name schedule name event name from]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure the start time for the event. For guidelines about entering time values, see the *SRC-PE Services and Policies Guide*.

Options

effective effective—(Optional) Interval after the associated *from* or *to* time during which the scheduled action can be initiated by a subscriber who is logging in to a subscriber session.

Value— Number of minutes in the range 0–153722867280912

Default— *

Editing Level—Basic

hour hour—(Optional) Hour of the day in the indicated month in which to schedule the event or exclusion.

Value— 0-23

Default— *

Editing Level—Basic

`minute` *minute*—(Optional) Minutes past the indicated hour in which to schedule the event or exclusion.

Value— 0-59

Default— *

Editing Level—Basic

`day-of-month` *day-of-month*—(Optional) Day of the month in which to schedule the event or exclusion. If you specify both `day-of-month` and `day-of-week`, `day-of-month` is used.

Value— 1-31

Default— *

Editing Level—Basic

`day-of-week` *day-of-week*—(Optional) Day of the week in which to schedule the event or exclusion. If you specify both `day-of-month` and `day-of-week`, `day-of-month` is used.

Value— 0-6, with 0 representing Sunday and each subsequent number representing the next day of the week

Default— *

Editing Level—Basic

`month` *month*—(Optional) Month of the year in which to schedule the event or exclusion.

Value— 1-12

Default— *

Editing Level—Basic

`year` *year*—(Optional) Year in which to schedule the event or exclusion.

Value— Four integers that indicate the year

Default— *

Editing Level—Basic

`time-zone` *time-zone*—(Optional) Name of the time zone to use in the schedule.

Value— One of the following values:

- *—Local time zone of the SAE

- An offset to GMT in the format: GMT (+ |-) (*hh:mm* | *hh mm* | *hh*)
 - *hh*—Hour of the day in the range of 0–23
 - *mm*—Minutes past the hour in the range of 0–59

Default— *

Editing Level—Basic

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* schedule *name* event *name* to

Syntax

```
subscribers retailer name schedule name event name to {
    effective effective;
    hour hour;
    minute minute;
    day-of-month day-of-month;
    day-of-week day-of-week;
    month month;
    year year;
    time-zone time-zone;
}
```

Hierarchy Level

```
[edit subscribers retailer name schedule name event name to]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure the end time for the event. For guidelines about entering time values, see the *SRC-PE Services and Policies Guide*.

These values apply only to services that have an authorization plug-in configured. If an authorization plug-in is not configured for the service associated with the schedule, these values are ignored.

Options

effective effective—(Optional) Interval after the associated *from* or *to* time during which the scheduled action can be initiated by a subscriber who is logging in to a subscriber session.

Value— Number of minutes in the range 0–153722867280912

Default— *

Editing Level—Basic

hour hour—(Optional) Hour of the day in the indicated month in which to schedule the event or exclusion.

Value— 0-23
Default— *
Editing Level—Basic

minute *minute*—(Optional) Minutes past the indicated hour in which to schedule the event or exclusion.

Value— 0-59
Default— *
Editing Level—Basic

day-of-month *day-of-month*—(Optional) Day of the month in which to schedule the event or exclusion. If you specify both *day-of-month* and *day-of-week*, *day-of-month* is used.

Value— 1-31
Default— *
Editing Level—Basic

day-of-week *day-of-week*—(Optional) Day of the week in which to schedule the event or exclusion. If you specify both *day-of-month* and *day-of-week*, *day-of-month* is used.

Value— 0-6, with 0 representing Sunday and each subsequent number representing the next day of the week
Default— *
Editing Level—Basic

month *month*—(Optional) Month of the year in which to schedule the event or exclusion.

Value— 1-12
Default— *
Editing Level—Basic

year *year*—(Optional) Year in which to schedule the event or exclusion.

Value— Four integers that indicate the year
Default— *
Editing Level—Basic

time-zone *time-zone*—(Optional) Name of the time zone to use in the schedule.

Value— One of the following values:

- *—Local time zone of the SAE
- An offset to GMT in the format: GMT (+ |-) (*hh:mm* | *hh mm* | *hh*)
 - *hh*—Hour of the day in the range of 0–23
 - *mm*—Minutes past the hour in the range of 0–59

Default— *

Editing Level—Basic

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder

Syntax

```
subscribers retailer name subscriber-folder folder-name {
    maximum-login maximum-login;
    session-timeout session-timeout;
    scope [scope...];
    substitution [substitution...];
}
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure a subscriber folder. You can create subscriber folders for retailers, existing subscriber folders, enterprises, and sites. You must create a subscriber folder in a retailer object before you can add other types of subscribers.

Options

folder-name folder-name— Name of the subscriber folder.

Value— Text

maximum-login maximum-login—(Optional) Maximum number of concurrent logins for subscribers associated with this object. By default, all subordinate objects use this value. However, if you specify this value for a subordinate object, that object and its subordinate objects will use the subordinate's value.

Value— Integer in the range 0–2147483647

Default— No value

Editing Level—Basic

session-timeout session-timeout—(Optional) Timeout for subscriber sessions. By default, all subordinate objects use this value. However, if you specify this value for a subordinate object, that object and its subordinate objects will use the subordinate's value.

Value— Number of seconds in the range 0–2147483647

Default— No value

Editing Level—Basic

`scope [scope . . .]`—(Optional) Service scope(s) assigned to subscribers. By default, this value is inherited from parent objects. However, if you specify a value here, it overrides the default for this subscriber and all subordinate objects.

Value— Single service or a list of scopes

Default— No value

Editing Level—Basic

`substitution [substitution . . .]`—(Optional) Actual values for parameters associated with this object. The policy engine substitutes parameters in policies associated with this object with the values that you specify in the substitution configuration.

Value— Substitution in the form `< parameter name> = < value>` . For example, `bandwidth= 1000000`.

Default— No value

Editing Level—Basic

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* device

Syntax

```
subscribers retailer name subscriber-folder folder-name device device-name {
    display-name display-name;
    maximum-login maximum-login;
    accounting-user-id accounting-user-id;
    substitution [substitution...];
}
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-name device]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure a device subscriber for subscriber sessions that manage the forwarding interface on JUNOS routing platforms and the router pseudo-subscriber on JUNOSe routers.

Options

device-name device-name— Name of the device subscriber.

Value— Text

display-name display-name—(Optional) Subscriber's name as it appears in portal applications. If you do not specify a display name, the value of the name option is used.

Value— Text

Default— No value

Editing Level—Basic

maximum-login maximum-login—(Optional) Maximum number of concurrent logins for subscribers associated with this object. By default, all subordinate objects use this value. However, if you specify this value for a subordinate object, that object and its subordinate objects will use the subordinate's value.

Value— Integer in the range 0-2147483647

Default— No value

Editing Level—Basic

`accounting-user-id` *accounting-user-id*—(Optional) Value that identifies the subscriber in accounting records. For a household subscriber, all subordinate subscribers generally use the same ID. For an enterprise, all parts of the enterprise generally use the same ID.

Value— Text

Default— No value

Editing Level—Basic

`substitution` [*substitution...*]—(Optional) Actual values for parameters associated with this object. The policy engine substitutes parameters in policies associated with this object with the values that you specify in the substitution configuration.

Value— Substitution in the form `< parameter name> = < value>` . For example, `bandwidth= 1000000`.

Default— No value

Editing Level—Basic

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* device *device-name* manager

Syntax

```
subscribers retailer name subscriber-folder folder-name device device-name manager name {
    role [(administrator | subscription | substitution | activation | vpn)...];
    encrypted-password encrypted-password;
    plain-text-password;
    description description;
}
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-name device device-name manager]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure a manager account.

Options

`name name`— Name of the manager account.

Value— Text

`role [(administrator | subscription | substitution | activation | vpn) . . .]`— Privilege level of the enterprise manager account. If you do not specify a privilege level, the manager has read-only access to associated objects.

Value

- `administrator`— Administrators have all privileges of the subscription, substitution, activation, and vpn roles. Additionally, administrators can create, delete, and modify other enterprise manager objects.

- `subscription`— Subscription managers can create, delete, modify, activate, and deactivate subscriptions.
- `substitution`— Substitution managers can modify policy parameters provided by subscriptions, enterprises, sites, and accesses.
- `activation`— Activation managers can activate and deactivate subscriptions.
- `vpn`— VPN managers can modify, export, and cancel the export of VPNs.

Default— No value

Editing Level—Basic

`encrypted-password` *encrypted-password*—(Optional) Login password and type of encryption.

Value— Enter a password, and select an encryption method that your directory supports.

- `crypt`—Style is `/etc/passwd`
- `sha`—Secure hash algorithm
- `md5`—Message digest #5

Default— No value

Editing Level—Basic

`plain-text-password`—(Optional) Plain text password. The password is encrypted using the algorithm defined in `system services editor password-encryption`.

Value— Text

Default— No value

Editing Level—Basic

`description` *description*—(Optional) Description of the object that you are configuring.

Value— Text

Default— No value

Editing Level—Basic

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* device *device-name* schedule

Syntax

```
subscribers retailer name subscriber-folder folder-name device device-name schedule name {  
    description description;  
}
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-name device device-name schedule]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure a service schedule.

Options

name name— Name of service schedule.

Value—Text

description description—(Optional) Description of the service schedule.

Value—Text

Default— No value

Editing Level—Basic

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* device *device-name* schedule *name* event

Syntax

```
subscribers retailer name subscriber-folder folder-name device device-name schedule name event name ...
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-name device device-name schedule name event]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure a scheduling event.

Options

name *name*— Name of the scheduling event.

Value—Text

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* device *device-name* schedule *name* event *name* action

Syntax

```
subscribers retailer name subscriber-folder folder-name device device-name schedule name event name action name {
    type (activate | deactivate | deny | deny-deactivate);
    service service;
    substitution [substitution...];
}
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-name device device-name schedule name event name action]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure actions to perform for the scheduled event.

Options

name name— Arbitrary identifier for action.

Value—Text

type (activate | deactivate | deny | deny-deactivate)— Type of action.

Value

- activate— Activate service at the time specified in the entry schedule.
- deactivate— Deactivate service at the time specified in the entry schedule.
- deny— Deny new activation requests during the time specified in the entry schedule; current sessions are not affected. This value applies only to services that have an authorization plugin configured.

- `deny-deactivate`— Deny new activation requests during the time specified in the entry schedule; current sessions are deactivated at the specified time. This value applies only to services that have an authorization plug-in configured.

Default— No value

Editing Level—Basic

`service service`— Name of service affected by this action.

Value—Text

Default— No value

Editing Level—Basic

`substitution [substitution...]`—(Optional) Substitutions to be used when activating the service. Substitutions apply only to service activations.

Value— An entry in valid substitution format. See the *SRC-PE Services and Policies Guide*.

Default— No value

Editing Level—Basic

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* device *device-name* schedule *name* event *name* action *name* attribute

Syntax

```
subscribers retailer name subscriber-folder folder-name device device-name schedule name event name action name attribute (sessionName | sessionTag | sessionTimeout | downStreamBandwidth | upStreamBandwidth) {
    value;
}
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-name device device-name schedule name event name action name attribute]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure subscription attributes. Subscription attributes apply only to service activations.

Options

Value

- *sessionName*— Name of the service session.
- *sessionTag*— Tag that can be used for accounting purposes.
- *sessionTimeout*— Session timeout to be used when the service is activated. The service session is deactivated when this timeout expires.
- *downStreamBandwidth*— Attribute used by SRC Admission Control Plug-In (SRC-ACP) to specify the rate of traffic between the network and the subscriber.
- *upStreamBandwidth*— Attribute used by SRC-ACP to specify the rate of traffic between the subscriber and the network.

value— Value of the specified subscription attribute.

Value— Depends on the specified subscription attribute

Default— No value

Editing Level—Basic

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* device *device-name* schedule *name* event *name* except

Syntax

```
subscribers retailer name subscriber-folder folder-name device device-name schedule name event name except name ...
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-name device device-name schedule name event name except]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure an exclusion for the event.

Options

name name—Arbitrary identifier for exclusion rule.

Value—Text

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* device *device-name* schedule *name* event *name* except *name* from

Syntax

```
subscribers retailer name subscriber-folder folder-name device device-name
schedule name event name except name from {
    hour hour;
    minute minute;
    day-of-month day-of-month;
    day-of-week day-of-week;
    month month;
    year year;
    time-zone time-zone;
}
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-name device device-name
schedule name event name except name from]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure the start time of the exclusion. For guidelines about entering time values, see the *SRC-PE Services and Policies Guide*.

Options

hour *hour*—(Optional) Hour of the day in the indicated month in which to schedule the event or exclusion.

Value— 0-23

Default— *

Editing Level—Basic

minute *minute*—(Optional) Minutes past the indicated hour in which to schedule the event or exclusion.

Value— 0-59
Default— *
Editing Level—Basic

`day-of-month` *day-of-month*—(Optional) Day of the month in which to schedule the event or exclusion. If you specify both `day-of-month` and `day-of-week`, `day-of-month` is used.

Value— 1-31
Default— *
Editing Level—Basic

`day-of-week` *day-of-week*—(Optional) Day of the week in which to schedule the event or exclusion. If you specify both `day-of-month` and `day-of-week`, `day-of-month` is used.

Value— 0-6, with 0 representing Sunday and each subsequent number representing the next day of the week
Default— *
Editing Level—Basic

`month` *month*—(Optional) Month of the year in which to schedule the event or exclusion.

Value— 1-12
Default— *
Editing Level—Basic

`year` *year*—(Optional) Year in which to schedule the event or exclusion.

Value— Four integers that indicate the year
Default— *
Editing Level—Basic

`time-zone` *time-zone*—(Optional) Name of the time zone to use in the schedule.

Value— One of the following values:

- *—Local time zone of the SAE
- An offset to GMT in the format: GMT (+ |-) (*hh:mm* | *hh mm* | *hh*)
 - *hh*—Hour of the day in the range of 0-23
 - *mm*—Minutes past the hour in the range of 0-59

Default— *
Editing Level—Basic

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* device *device-name* schedule *name* event *name* except *name* to

Syntax

```
subscribers retailer name subscriber-folder folder-name device device-name
schedule name event name except name to {
    hour hour;
    minute minute;
    day-of-month day-of-month;
    day-of-week day-of-week;
    month month;
    year year;
    time-zone time-zone;
}
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-name device device-name
schedule name event name except name to]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure the end time of the exclusion. For guidelines about entering time values, see the *SRC-PE Services and Policies Guide*.

These values apply only to services that have an authorization plug-in configured. If an authorization plug-in is not configured for the service associated with the schedule, these values are ignored.

Options

hour *hour*—(Optional) Hour of the day in the indicated month in which to schedule the event or exclusion.

Value— 0-23

Default— *

Editing Level—Basic

`minute` *minute*—(Optional) Minutes past the indicated hour in which to schedule the event or exclusion.

Value— 0-59

Default— *

Editing Level—Basic

`day-of-month` *day-of-month*—(Optional) Day of the month in which to schedule the event or exclusion. If you specify both `day-of-month` and `day-of-week`, `day-of-month` is used.

Value— 1-31

Default— *

Editing Level—Basic

`day-of-week` *day-of-week*—(Optional) Day of the week in which to schedule the event or exclusion. If you specify both `day-of-month` and `day-of-week`, `day-of-month` is used.

Value— 0-6, with 0 representing Sunday and each subsequent number representing the next day of the week

Default— *

Editing Level—Basic

`month` *month*—(Optional) Month of the year in which to schedule the event or exclusion.

Value— 1-12

Default— *

Editing Level—Basic

`year` *year*—(Optional) Year in which to schedule the event or exclusion.

Value— Four integers that indicate the year

Default— *

Editing Level—Basic

`time-zone` *time-zone*—(Optional) Name of the time zone to use in the schedule.

Value— One of the following values:

- *—Local time zone of the SAE
- An offset to GMT in the format: GMT (+ | -) (*hh:mm* | *hh mm* | *hh*)

- *hh*—Hour of the day in the range of 0–23
- *mm*—Minutes past the hour in the range of 0–59

Default— *

Editing Level—Basic

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* device *device-name* schedule *name* event *name* from

Syntax

```
subscribers retailer name subscriber-folder folder-name device device-name schedule name event name from {
    effective effective;
    hour hour;
    minute minute;
    day-of-month day-of-month;
    day-of-week day-of-week;
    month month;
    year year;
    time-zone time-zone;
}
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-name device device-name schedule name event name from]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure the start time for the event. For guidelines about entering time values, see the *SRC-PE Services and Policies Guide*.

Options

effective effective—(Optional) Interval after the associated *from* or *to* time during which the scheduled action can be initiated by a subscriber who is logging in to a subscriber session.

Value— Number of minutes in the range 0–153722867280912

Default— *

Editing Level—Basic

hour hour—(Optional) Hour of the day in the indicated month in which to schedule the event or exclusion.

Value— 0-23
Default— *
Editing Level—Basic

minute *minute*—(Optional) Minutes past the indicated hour in which to schedule the event or exclusion.

Value— 0-59
Default— *
Editing Level—Basic

day-of-month *day-of-month*—(Optional) Day of the month in which to schedule the event or exclusion. If you specify both *day-of-month* and *day-of-week*, *day-of-month* is used.

Value— 1-31
Default— *
Editing Level—Basic

day-of-week *day-of-week*—(Optional) Day of the week in which to schedule the event or exclusion. If you specify both *day-of-month* and *day-of-week*, *day-of-month* is used.

Value— 0-6, with 0 representing Sunday and each subsequent number representing the next day of the week
Default— *
Editing Level—Basic

month *month*—(Optional) Month of the year in which to schedule the event or exclusion.

Value— 1-12
Default— *
Editing Level—Basic

year *year*—(Optional) Year in which to schedule the event or exclusion.

Value— Four integers that indicate the year
Default— *
Editing Level—Basic

time-zone *time-zone*—(Optional) Name of the time zone to use in the schedule.

Value— One of the following values:

- *—Local time zone of the SAE
- An offset to GMT in the format: GMT (+ |-) (*hh:mm* | *hh mm* | *hh*)
 - *hh*—Hour of the day in the range of 0–23
 - *mm*—Minutes past the hour in the range of 0–59

Default— *

Editing Level—Basic

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* device *device-name* schedule *name* event *name* to

Syntax

```
subscribers retailer name subscriber-folder folder-name device device-name schedule name event name to {
    effective effective;
    hour hour;
    minute minute;
    day-of-month day-of-month;
    day-of-week day-of-week;
    month month;
    year year;
    time-zone time-zone;
}
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-name device device-name schedule name event name to]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure the end time for the event. For guidelines about entering time values, see the *SRC-PE Services and Policies Guide*.

These values apply only to services that have an authorization plug-in configured. If an authorization plug-in is not configured for the service associated with the schedule, these values are ignored.

Options

effective effective—(Optional) Interval after the associated *from* or *to* time during which the scheduled action can be initiated by a subscriber who is logging in to a subscriber session.

Value— Number of minutes in the range 0–153722867280912

Default— *

Editing Level—Basic

`hour` *hour*—(Optional) Hour of the day in the indicated month in which to schedule the event or exclusion.

Value— 0-23
Default— *
Editing Level—Basic

`minute` *minute*—(Optional) Minutes past the indicated hour in which to schedule the event or exclusion.

Value— 0-59
Default— *
Editing Level—Basic

`day-of-month` *day-of-month*—(Optional) Day of the month in which to schedule the event or exclusion. If you specify both `day-of-month` and `day-of-week`, `day-of-month` is used.

Value— 1-31
Default— *
Editing Level—Basic

`day-of-week` *day-of-week*—(Optional) Day of the week in which to schedule the event or exclusion. If you specify both `day-of-month` and `day-of-week`, `day-of-month` is used.

Value— 0-6, with 0 representing Sunday and each subsequent number representing the next day of the week
Default— *
Editing Level—Basic

`month` *month*—(Optional) Month of the year in which to schedule the event or exclusion.

Value— 1-12
Default— *
Editing Level—Basic

`year` *year*—(Optional) Year in which to schedule the event or exclusion.

Value— Four integers that indicate the year
Default— *
Editing Level—Basic

`time-zone` *time-zone*—(Optional) Name of the time zone to use in the schedule.

Value— One of the following values:

- *—Local time zone of the SAE
- An offset to GMT in the format: GMT (+ | -) (*hh:mm* | *hh mm* | *hh*)
 - *hh*—Hour of the day in the range of 0–23
 - *mm*—Minutes past the hour in the range of 0–59

Default— *

Editing Level—Basic

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* device *device-name* subscription

Syntax

```
subscribers retailer name subscriber-folder folder-name device device-name subscription subscription-name {
    status (active | suspended | hidden);
    activation (manual | automatically-on-login);
    activation-order activation-order;
    substitution [substitution...];
}
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-name device device-name subscription]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure a service subscription.

Options

subscription-name *subscription-name*— Name of the service optionally followed by "*%subscription-id*". Use "*%subscription-id*" to subscribe subscribers to the same service multiple times with different subscription attributes.

Value— Text

status (active | suspended | hidden)— Status of the service subscription.

Value

- active— The subscriber can activate the subscription.
- suspended— The subscriber cannot activate the subscription, although it may be visible through the portal. If you change the status of the subscription to suspended while the subscription is active, the service is deactivated.

- **hidden**— Service is not available through a portal and cannot be activated automatically when the subscribers log in. If you change the status of the subscription to hidden while the subscription is active, the service is not deactivated.

Default— Active

Editing Level—Basic

`activation (manual | automatically-on-login)`— Specify how the service is activated.

Value

- **manual**— Subscriber must manually activate the service.
- **automatically-on-login**— Service is activated automatically when the subscriber logs in.

Default— Manual activation

Editing Level—Basic

`activation-order activation-order`—(Optional) Order in which subscriptions are automatically activated on login relative to the subscriber's other subscriptions that are configured to activate on login. Review all subscriptions that are configured to activate on login for the subscriber, and review the activation order for subscriptions of the parent subscribers. Assign the lowest number to the subscription that you want to activate first. Assign higher numbers to the other subscriptions in the order that you want the SAE to activate them. If you assign the same number to multiple subscriptions, the SAE activates them in an unspecified order.

Value— Integer in the range 0-21474863647

Default— 10000

Editing Level—Basic

`substitution [substitution...]`—(Optional) Actual values for parameters associated with this object. The policy engine substitutes parameters in policies associated with this object with the values that you specify in the substitution configuration.

Value— Substitution in the form `< parameter name> = < value>` . For example, `bandwidth= 1000000`.

Default— No value

Editing Level—Basic

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* enterprise

Syntax

```
subscribers retailer name subscriber-folder folder-name enterprise name {
    display-name display-name;
    accounting-user-id accounting-user-id;
    description description;
    scope [scope...];
    imported-extranet [imported-extranet...];
    substitution [substitution...];
}
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-name enterprise]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure an enterprise subscriber.

Options

`name name`— Name of the enterprise subscriber

Value— Text

`display-name display-name`—(Optional) Subscriber's name as it appears in portal applications. If you do not specify a display name, the value of the name option is used.

Value— Text

Default— No value

Editing Level—Basic

`accounting-user-id accounting-user-id`—(Optional) Value that identifies the subscriber in accounting records. For a household subscriber, all subordinate subscribers generally use the same ID. For an enterprise, all parts of the enterprise generally use the

same ID.

Value— Text
Default— No value
Editing Level—Basic

`description` *description*—(Optional) Description of the object that you are configuring.

Value— Text
Default— No value
Editing Level—Basic

`scope` [*scope . . .*]—(Optional) Service scope(s) assigned to subscribers. By default, this value is inherited from parent objects. However, if you specify a value here, it overrides the default for this subscriber and all subordinate objects.

Value— Single service or a list of scopes
Default— No value
Editing Level—Basic

`imported-extranet` [*imported-extranet . . .*]—(Optional) Extranet exported by another retailer or enterprise.

Value— DN of the extranet
Default— No value
Editing Level—Basic

`substitution` [*substitution . . .*]—(Optional) Actual values for parameters associated with this object. The policy engine substitutes parameters in policies associated with this object with the values that you specify in the substitution configuration.

Value— Substitution in the form < parameter name> = < value> . For example, `bandwidth= 1000000`.
Default— No value
Editing Level—Basic

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* enterprise *name* access

Syntax

```
subscribers retailer name subscriber-folder folder-
name enterprise name access name {
    routing-protocol routing-protocol;
    interface-alias interface-alias;
    interface-description interface-description;
    interface-name interface-name;
    unique-id unique-id;
    port-id port-id;
    device-name device-name;
    display-name display-name;
    accounting-user-id accounting-user-id;
    substitution [substitution...];
}
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-
name enterprise name access]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure an access. You can configure an access for an enterprise or for a site. An access determines the way that the enterprise or site accesses Internet services, and specifies a set of services that are available to the enterprise or site.

Options

name name— Name of the access.

Value— Text

routing-protocol routing-protocol—(Optional) Routing protocol used at the enterprise or site. If you build a custom enterprise manager application, you can access this information through the enterprise portal APIs.

Value— Routing protocol

Default— No value

Editing Level—Basic

`interface-alias` *interface-alias*—(Optional) Description of the router interface. You can use this option to allow subscriber classification scripts to match interfaces reported from the network to be matched with the corresponding access.

Value— Interface description that is configured on the router.

Default— No value

Editing Level—Basic

`interface-description` *interface-description*—(Optional) Name of the interface that SNMP uses. You can use this option to allow subscriber classification scripts to match interfaces reported from the network to be matched with the corresponding access.

Value— One of the following:

- For JUNOSe routers, the format of the description is `ip< slot> / < port> .< subinterface>`
- On the JUNOS routing platform, interface description is the same as `interfaceName`

Default— No value

Editing Level—Basic

`interface-name` *interface-name*—(Optional) Name of the interface. You can use this option to allow subscriber classification scripts to match interfaces reported from the network to be matched with the corresponding access.

Value— One of the following:

- Name of the interface in your router CLI syntax.
- `FORWARDING_INTERFACE` for routing instance (used by traffic mirroring).

Default— No value

Editing Level—Basic

`unique-id` *unique-id*—(Optional) Unique identifier of the router. You can use this option to allow subscriber classification scripts to match interfaces reported from the

network to be matched with the corresponding access.

Value— Index of the router in the SNMP table for all interfaces.

Default— No value

Editing Level—Basic

`port-id` *port-id*—(Optional) NAS port ID reported by the JUNOSe router through COPS. You can use this option to allow subscriber classification scripts to match interfaces reported from the network to be matched with the corresponding access.

Value— Includes the interface name and additional layer 2 information.

Default— No value

Editing Level—Basic

`device-name` *device-name*—(Optional) Name of the router or other device.

Value— Name of the device

Default— No value

Editing Level—Basic

`display-name` *display-name*—(Optional) Subscriber's name as it appears in portal applications. If you do not specify a display name, the value of the name option is used.

Value— Text

Default— No value

Editing Level—Basic

`accounting-user-id` *accounting-user-id*—(Optional) Value that identifies the subscriber in accounting records. For a household subscriber, all subordinate subscribers generally use the same ID. For an enterprise, all parts of the enterprise generally use the same ID.

Value— Text

Default— No value

Editing Level—Basic

`substitution` [*substitution...*]—(Optional) Actual values for parameters associated with this object. The policy engine substitutes parameters in policies associated with this object with the values that you specify in the substitution configuration.

Value— Substitution in the form `< parameter name> = < value>` . For example, `bandwidth= 1000000`.

Default— No value

Editing Level—Basic

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* enterprise *name* access *name* admission-control

Syntax

```
subscribers retailer name subscriber-folder folder-name enterprise name access name admission-control {
    downstream-provisioned-rate downstream-provisioned-rate;
    upstream-provisioned-rate upstream-provisioned-rate;
    downstream-sync-rate downstream-sync-rate;
    upstream-sync-rate upstream-sync-rate;
    congestion-points [congestion-points...];
}
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-name enterprise name access name admission-control]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure bandwidths for subscribers that the SRC-ACP manages.

Options

`downstream-provisioned-rate` *downstream-provisioned-rate*—(Optional)
Provisioned downstream bandwidth. This rate is used if the subscriber bandwidth settings are not provided by the API for ACP or by the `downstream-sync-rate` option.

Value— Number of bps in the range 0–9223372036854775807

Default— No value

Editing Level—Basic

`upstream-provisioned-rate` *upstream-provisioned-rate*—(Optional)
Provisioned upstream bandwidth. This rate is used if the subscriber bandwidth settings are not provided by the API for ACP or by the `upstream-sync-rate` option.

Value— Number of bps in the range 0–9223372036854775807

Default— No value

Editing Level—Basic

`downstream-sync-rate` *downstream-sync-rate*—(Optional) Actual downstream bandwidth for the current subscriber session. If you do not set this value and it is not provided by the API for ACP, the value of the `downstream-provisioned-rate` option is used.

Value— Number of bps in the range 0–9223372036854775807

Default— No value

Editing Level—Basic

`upstream-sync-rate` *upstream-sync-rate*—(Optional) Actual upstream bandwidth for the current subscriber session. If you do not set this value and it is not provided by the API for ACP, the value of the `upstream-provisioned-rate` option is used.

Value— Number of bps in the range 0–9223372036854775807

Default— No value

Editing Level—Basic

`congestion-points` [*congestion-points...*]—(Optional) Congestion points for the subscriber.

Value— DN of interface associated with congestion point

Default— No value

Editing Level—Basic

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* enterprise *name* access *name* manager

Syntax

```
subscribers retailer name subscriber-folder folder-name enterprise name access name manager name {
    role [(administrator | subscription | substitution | activation | vpn)...];
    encrypted-password encrypted-password;
    plain-text-password;
    description description;
}
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-name enterprise name access name manager]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure a manager account.

Options

name name— Name of the manager account.

Value— Text

role [(administrator | subscription | substitution | activation | vpn) . . .]— Privilege level of the enterprise manager account. If you do not specify a privilege level, the manager has read-only access to associated objects.

Value

- *administrator*— Administrators have all privileges of the subscription, substitution, activation, and vpn roles. Additionally, administrators can create, delete, and modify other enterprise manager objects.

- `subscription`— Subscription managers can create, delete, modify, activate, and deactivate subscriptions.
- `substitution`— Substitution managers can modify policy parameters provided by subscriptions, enterprises, sites, and accesses.
- `activation`— Activation managers can activate and deactivate subscriptions.
- `vpn`— VPN managers can modify, export, and cancel the export of VPNs.

Default— No value

Editing Level—Basic

`encrypted-password` *encrypted-password*—(Optional) Login password and type of encryption.

Value— Enter a password, and select an encryption method that your directory supports.

- `crypt`—Style is `/etc/passwd`
- `sha`—Secure hash algorithm
- `md5`—Message digest #5

Default— No value

Editing Level—Basic

`plain-text-password`—(Optional) Plain text password. The password is encrypted using the algorithm defined in `system services editor password-encryption`.

Value— Text

Default— No value

Editing Level—Basic

`description` *description*—(Optional) Description of the object that you are configuring.

Value— Text

Default— No value

Editing Level—Basic

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* enterprise *name* access *name* schedule

Syntax

```
subscribers retailer name subscriber-folder folder-
name enterprise name access name schedule name {
    description description;
}
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-
name enterprise name access name schedule]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure a service schedule.

Options

name name— Name of service schedule.

Value—Text

description description—(Optional) Description of the service schedule.

Value—Text

Default— No value

Editing Level—Basic

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* enterprise *name* access *name* schedule *name* event

Syntax

```
subscribers retailer name subscriber-folder folder-name enterprise name access name schedule name event name ...
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-name enterprise name access name schedule name event]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure a scheduling event.

Options

`name name`— Name of the scheduling event.

Value—Text

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* enterprise *name* access *name* schedule *name* event *name* action

Syntax

```
subscribers retailer name subscriber-folder folder-name enterprise name access name schedule name event name action name {
    type (activate | deactivate | deny | deny-deactivate);
    service service;
    substitution [substitution...];
}
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-name enterprise name access name schedule name event name action]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure actions to perform for the scheduled event.

Options

name name— Arbitrary identifier for action.

Value—Text

type (activate | deactivate | deny | deny-deactivate)— Type of action.

Value

- activate— Activate service at the time specified in the entry schedule.
- deactivate— Deactivate service at the time specified in the entry schedule.
- deny— Deny new activation requests during the time specified in the entry schedule; current sessions are not affected. This value applies only to services that have an authorization plug-in configured.
- deny-deactivate— Deny new activation requests during the time specified in the entry schedule; current sessions are deactivated at the specified time. This value applies only to services that have an authorization plug-in configured.

Default— No value
Editing Level—Basic

`service service`— Name of service affected by this action.

Value—Text
Default— No value
Editing Level—Basic

`substitution [substitution...]`—(Optional) Substitutions to be used when activating the service. Substitutions apply only to service activations.

Value— An entry in valid substitution format. See the *SRC-PE Services and Policies Guide*.
Default— No value
Editing Level—Basic

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* enterprise *name* access *name* schedule *name* event *name* action *name* attribute

Syntax

```
subscribers retailer name subscriber-folder folder-
name enterprise name access name schedule name event name action name attribute (sessionName |
sessionTag | sessionTimeout | downStreamBandwidth | upStreamBandwidth) {
    value;
}
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-
name enterprise name access name schedule name event name action name attribute]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure subscription attributes. Subscription attributes apply only to service activations.

Options

Value

- *sessionName*— Name of the service session.
- *sessionTag*— Tag that can be used for accounting purposes.
- *sessionTimeout*— Session timeout to be used when the service is activated. The service session is deactivated when this timeout expires.
- *downStreamBandwidth*— Attribute used by SRC Admission Control Plug-In (SRC-ACP) to specify the rate of traffic between the network and the subscriber.
- *upStreamBandwidth*— Attribute used by SRC-ACP to specify the rate of traffic between the subscriber and the network.

value— Value of the specified subscription attribute.

Value— Depends on the specified subscription attribute

Default— No value

Editing Level—Basic

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* enterprise *name* access *name* schedule *name* event *name* except

Syntax

```
subscribers retailer name subscriber-folder folder-name enterprise name access name schedule name event name except name ...
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-name enterprise name access name schedule name event name except]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure an exclusion for the event.

Options

name name— Arbitrary identifier for exclusion rule.

Value—Text

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* enterprise *name* access *name* schedule *name* event *name* except *name* from

Syntax

```
subscribers retailer name subscriber-folder folder-name enterprise name access name schedule name event name except name from {
    hour hour;
    minute minute;
    day-of-month day-of-month;
    day-of-week day-of-week;
    month month;
    year year;
    time-zone time-zone;
}
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-name enterprise name access name schedule name event name except name from]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure the start time of the exclusion. For guidelines about entering time values, see the *SRC-PE Services and Policies Guide*.

Options

hour *hour*—(Optional) Hour of the day in the indicated month in which to schedule the event or exclusion.

Value— 0-23
Default— *
Editing Level—Basic

minute *minute*—(Optional) Minutes past the indicated hour in which to schedule the event or exclusion.

Value— 0-59
Default— *
Editing Level—Basic

day-of-month *day-of-month*—(Optional) Day of the month in which to schedule the event or exclusion. If you specify both day-of-month and day-of-week, day-of-month is used.

Value— 1-31
Default— *
Editing Level—Basic

day-of-week *day-of-week*—(Optional) Day of the week in which to schedule the event or exclusion. If you specify both day-of-month and day-of-week, day-of-month is used.

Value— 0-6, with 0 representing Sunday and each subsequent number representing the next day of the week

Default— *

Editing Level—Basic

`month month`—(Optional) Month of the year in which to schedule the event or exclusion.

Value— 1-12

Default— *

Editing Level—Basic

`year year`—(Optional) Year in which to schedule the event or exclusion.

Value— Four integers that indicate the year

Default— *

Editing Level—Basic

`time-zone time-zone`—(Optional) Name of the time zone to use in the schedule.

Value— One of the following values:

- *—Local time zone of the SAE
- An offset to GMT in the format: GMT (+ | -) (*hh:mm* | *hh mm* | *hh*)
 - *hh*—Hour of the day in the range of 0-23
 - *mm*—Minutes past the hour in the range of 0-59

Default— *

Editing Level—Basic

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* enterprise *name* access *name* schedule *name* event *name* except *name* to

Syntax

```
subscribers retailer name subscriber-folder folder-name enterprise name access name schedule name event name except name to {
    hour hour;
    minute minute;
    day-of-month day-of-month;
    day-of-week day-of-week;
    month month;
    year year;
    time-zone time-zone;
}
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-name enterprise name access name schedule name event name except name to]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure the end time of the exclusion. For guidelines about entering time values, see the *SRC-PE Services and Policies Guide*.

These values apply only to services that have an authorization plug-in configured. If an authorization plug-in is not configured for the service associated with the schedule, these values are ignored.

Options

hour *hour*—(Optional) Hour of the day in the indicated month in which to schedule the event or exclusion.

Value— 0-23
Default— *
Editing Level—Basic

minute *minute*—(Optional) Minutes past the indicated hour in which to schedule the event or exclusion.

Value— 0-59
Default— *
Editing Level—Basic

day-of-month *day-of-month*—(Optional) Day of the month in which to schedule the event or exclusion. If you specify both *day-of-month* and *day-of-week*, *day-of-month* is used.

Value— 1-31
Default— *

Editing Level—Basic

`day-of-week` *day-of-week*—(Optional) Day of the week in which to schedule the event or exclusion. If you specify both `day-of-month` and `day-of-week`, `day-of-month` is used.

Value— 0-6, with 0 representing Sunday and each subsequent number representing the next day of the week

Default— *

Editing Level—Basic

`month` *month*—(Optional) Month of the year in which to schedule the event or exclusion.

Value— 1-12

Default— *

Editing Level—Basic

`year` *year*—(Optional) Year in which to schedule the event or exclusion.

Value— Four integers that indicate the year

Default— *

Editing Level—Basic

`time-zone` *time-zone*—(Optional) Name of the time zone to use in the schedule.

Value— One of the following values:

- *—Local time zone of the SAE
- An offset to GMT in the format: GMT (+ | -) (*hh:mm* | *hh mm* | *hh*)
 - *hh*—Hour of the day in the range of 0-23
 - *mm*—Minutes past the hour in the range of 0-59

Default— *

Editing Level—Basic

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* enterprise *name* access *name* schedule *name* event *name* from

Syntax

```
subscribers retailer name subscriber-folder folder-
name enterprise name access name schedule name event name from {
    effective effective;
    hour hour;
    minute minute;
    day-of-month day-of-month;
    day-of-week day-of-week;
    month month;
    year year;
    time-zone time-zone;
}
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-
name enterprise name access name schedule name event name from]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure the start time for the event. For guidelines about entering time values, see the *SRC-PE Services and Policies Guide*.

Options

effective effective—(Optional) Interval after the associated *from* or *to* time during which the scheduled action can be initiated by a subscriber who is logging in to a subscriber session.

Value— Number of minutes in the range 0-153722867280912

Default— *

Editing Level—Basic

hour hour—(Optional) Hour of the day in the indicated month in which to schedule the event or exclusion.

Value— 0-23

Default— *

Editing Level—Basic

`minute` *minute*—(Optional) Minutes past the indicated hour in which to schedule the event or exclusion.

Value— 0-59

Default— *

Editing Level—Basic

`day-of-month` *day-of-month*—(Optional) Day of the month in which to schedule the event or exclusion. If you specify both `day-of-month` and `day-of-week`, `day-of-month` is used.

Value— 1-31

Default— *

Editing Level—Basic

`day-of-week` *day-of-week*—(Optional) Day of the week in which to schedule the event or exclusion. If you specify both `day-of-month` and `day-of-week`, `day-of-month` is used.

Value— 0-6, with 0 representing Sunday and each subsequent number representing the next day of the week

Default— *

Editing Level—Basic

`month` *month*—(Optional) Month of the year in which to schedule the event or exclusion.

Value— 1-12

Default— *

Editing Level—Basic

`year` *year*—(Optional) Year in which to schedule the event or exclusion.

Value— Four integers that indicate the year

Default— *

Editing Level—Basic

`time-zone` *time-zone*—(Optional) Name of the time zone to use in the schedule.

Value— One of the following values:

- *—Local time zone of the SAE
- An offset to GMT in the format: GMT (+ |-) (*hh:mm* | *hh mm* | *hh*)
 - *hh*—Hour of the day in the range of 0-23
 - *mm*—Minutes past the hour in the range of 0-59

Default— *
Editing Level—Basic

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* enterprise *name* access *name* schedule *name* event *name* to

Syntax

```
subscribers retailer name subscriber-folder folder-name enterprise name access name schedule name event name to {
    effective effective;
    hour hour;
    minute minute;
    day-of-month day-of-month;
    day-of-week day-of-week;
    month month;
    year year;
    time-zone time-zone;
}
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-name enterprise name access name schedule name event name to]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure the end time for the event. For guidelines about entering time values, see the *SRC-PE Services and Policies Guide*.

These values apply only to services that have an authorization plug-in configured. If an authorization plug-in is not configured for the service associated with the schedule, these values are ignored.

Options

effective effective—(Optional) Interval after the associated *from* or *to* time during which the scheduled action can be initiated by a subscriber who is logging in to a subscriber session.

Value— Number of minutes in the range 0–153722867280912

Default— *

Editing Level—Basic

hour *hour*—(Optional) Hour of the day in the indicated month in which to schedule the event or exclusion.

Value— 0-23
Default— *
Editing Level—Basic

minute *minute*—(Optional) Minutes past the indicated hour in which to schedule the event or exclusion.

Value— 0-59
Default— *
Editing Level—Basic

day-of-month *day-of-month*—(Optional) Day of the month in which to schedule the event or exclusion. If you specify both *day-of-month* and *day-of-week*, *day-of-month* is used.

Value— 1-31
Default— *
Editing Level—Basic

day-of-week *day-of-week*—(Optional) Day of the week in which to schedule the event or exclusion. If you specify both *day-of-month* and *day-of-week*, *day-of-month* is used.

Value— 0-6, with 0 representing Sunday and each subsequent number representing the next day of the week
Default— *
Editing Level—Basic

month *month*—(Optional) Month of the year in which to schedule the event or exclusion.

Value— 1-12
Default— *
Editing Level—Basic

year *year*—(Optional) Year in which to schedule the event or exclusion.

Value— Four integers that indicate the year
Default— *
Editing Level—Basic

`time-zone` *time-zone*—(Optional) Name of the time zone to use in the schedule.

Value— One of the following values:

- *—Local time zone of the SAE
- An offset to GMT in the format: GMT (+ |-) (*hh:mm* | *hh mm* | *hh*)
 - *hh*—Hour of the day in the range of 0–23
 - *mm*—Minutes past the hour in the range of 0–59

Default— *

Editing Level—Basic

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* enterprise *name* access *name* subscription

Syntax

```
subscribers retailer name subscriber-folder folder-name enterprise name access name subscription subscription-name {
    status (active | suspended | hidden);
    activation (manual | automatically-on-login);
    activation-order activation-order;
    substitution [substitution...];
}
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-name enterprise name access name subscription]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure a service subscription.

Options

subscription-name *subscription-name*— Name of the service optionally followed by "%*subscription-id*". Use "%*subscription-id*" to subscribe subscribers to the same service multiple times with different subscription attributes.

Value— Text

status (active | suspended | hidden)— Status of the service subscription.

Value

- active— The subscriber can activate the subscription.
- suspended— The subscriber cannot activate the subscription, although it may be visible through the portal. If you change the status of the subscription to suspended while the subscription is active, the service is deactivated.

- **hidden**— Service is not available through a portal and cannot be activated automatically when the subscribers log in. If you change the status of the subscription to hidden while the subscription is active, the service is not deactivated.

Default— Active

Editing Level—Basic

`activation (manual | automatically-on-login)`— Specify how the service is activated.

Value

- **manual**— Subscriber must manually activate the service.
- **automatically-on-login**— Service is activated automatically when the subscriber logs in.

Default— Manual activation

Editing Level—Basic

`activation-order activation-order`—(Optional) Order in which subscriptions are automatically activated on login relative to the subscriber's other subscriptions that are configured to activate on login. Review all subscriptions that are configured to activate on login for the subscriber, and review the activation order for subscriptions of the parent subscribers. Assign the lowest number to the subscription that you want to activate first. Assign higher numbers to the other subscriptions in the order that you want the SAE to activate them. If you assign the same number to multiple subscriptions, the SAE activates them in an unspecified order.

Value— Integer in the range 0-21474863647

Default— 10000

Editing Level—Basic

`substitution [substitution...]`—(Optional) Actual values for parameters associated with this object. The policy engine substitutes parameters in policies associated with this object with the values that you specify in the substitution configuration.

Value— Substitution in the form `< parameter name> = < value>` . For example, `bandwidth= 1000000`.

Default— No value

Editing Level—Basic

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* enterprise *name* device

Syntax

```
subscribers retailer name subscriber-folder folder-name enterprise name device device-name {
    display-name display-name;
    maximum-login maximum-login;
    accounting-user-id accounting-user-id;
    substitution [substitution...];
}
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-name enterprise name device]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure a device subscriber for subscriber sessions that manage the forwarding interface on JUNOS routing platforms and the router pseudo-subscriber on JUNOSe routers.

Options

device-name device-name— Name of the device subscriber.

Value— Text

display-name display-name—(Optional) Subscriber's name as it appears in portal applications. If you do not specify a display name, the value of the name option is used.

Value— Text

Default— No value

Editing Level—Basic

maximum-login maximum-login—(Optional) Maximum number of concurrent logins for subscribers associated with this object. By default, all subordinate objects use this

value. However, if you specify this value for a subordinate object, that object and its subordinate objects will use the subordinate's value.

Value— Integer in the range 0–2147483647

Default— No value

Editing Level—Basic

`accounting-user-id` *accounting-user-id*—(Optional) Value that identifies the subscriber in accounting records. For a household subscriber, all subordinate subscribers generally use the same ID. For an enterprise, all parts of the enterprise generally use the same ID.

Value— Text

Default— No value

Editing Level—Basic

`substitution` [*substitution...*]—(Optional) Actual values for parameters associated with this object. The policy engine substitutes parameters in policies associated with this object with the values that you specify in the substitution configuration.

Value— Substitution in the form `< parameter name> = < value>` . For example, `bandwidth= 1000000`.

Default— No value

Editing Level—Basic

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* enterprise *name* device *device-name* manager

Syntax

```
subscribers retailer name subscriber-folder folder-name enterprise name device device-name manager name {
    role [(administrator | subscription | substitution | activation | vpn)...];
    encrypted-password encrypted-password;
    plain-text-password;
    description description;
}
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-name enterprise name device device-name manager]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure a manager account.

Options

name name— Name of the manager account.

Value— Text

role [(administrator | subscription | substitution | activation | vpn) . . .]— Privilege level of the enterprise manager account. If you do not specify a privilege level, the manager has read-only access to associated objects.

Value

- *administrator*— Administrators have all privileges of the subscription, substitution, activation, and vpn roles. Additionally, administrators can create, delete, and modify other enterprise manager objects.

- `subscription`— Subscription managers can create, delete, modify, activate, and deactivate subscriptions.
- `substitution`— Substitution managers can modify policy parameters provided by subscriptions, enterprises, sites, and accesses.
- `activation`— Activation managers can activate and deactivate subscriptions.
- `vpn`— VPN managers can modify, export, and cancel the export of VPNs.

Default— No value

Editing Level—Basic

`encrypted-password` *encrypted-password*—(Optional) Login password and type of encryption.

Value— Enter a password, and select an encryption method that your directory supports.

- `crypt`—Style is `/etc/passwd`
- `sha`—Secure hash algorithm
- `md5`—Message digest #5

Default— No value

Editing Level—Basic

`plain-text-password`—(Optional) Plain text password. The password is encrypted using the algorithm defined in `system services editor password-encryption`.

Value— Text

Default— No value

Editing Level—Basic

`description` *description*—(Optional) Description of the object that you are configuring.

Value— Text

Default— No value

Editing Level—Basic

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* enterprise *name* device *device-name* schedule

Syntax

```
subscribers retailer name subscriber-folder folder-
name enterprise name device device-name schedule name {
    description description;
}
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-
name enterprise name device device-name schedule]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure a service schedule.

Options

name name— Name of service schedule.

Value—Text

description description—(Optional) Description of the service schedule.

Value—Text

Default— No value

Editing Level—Basic

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* enterprise *name* device *device-name* schedule *name* event

Syntax

```
subscribers retailer name subscriber-folder folder-name enterprise name device device-name schedule name event name ...
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-name enterprise name device device-name schedule name event]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure a scheduling event.

Options

name name— Name of the scheduling event.

Value—Text

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* enterprise *name* device *device-name* schedule *name* event *name* action

Syntax

```
subscribers retailer name subscriber-folder folder-name enterprise name device device-name schedule name event name action name {
    type (activate | deactivate | deny | deny-deactivate);
    service service;
    substitution [substitution...];
}
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-name enterprise name device device-name schedule name event name action]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure actions to perform for the scheduled event.

Options

name name— Arbitrary identifier for action.

Value—Text

type (activate | deactivate | deny | deny-deactivate)— Type of action.

Value

- *activate*— Activate service at the time specified in the entry schedule.
- *deactivate*— Deactivate service at the time specified in the entry schedule.
- *deny*— Deny new activation requests during the time specified in the entry schedule; current sessions are not affected. This

value applies only to services that have an authorization plug-in configured.

- **deny-deactivate**— Deny new activation requests during the time specified in the entry schedule; current sessions are deactivated at the specified time. This value applies only to services that have an authorization plug-in configured.

Default— No value

Editing Level—Basic

`service service`— Name of service affected by this action.

Value—Text

Default— No value

Editing Level—Basic

`substitution [substitution...]`—(Optional) Substitutions to be used when activating the service. Substitutions apply only to service activations.

Value— An entry in valid substitution format. See the *SRC-PE Services and Policies Guide*.

Default— No value

Editing Level—Basic

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* enterprise *name* device *device-name* schedule *name* event *name* action *name* attribute

Syntax

```
subscribers retailer name subscriber-folder folder-name enterprise name device device-name schedule name event name action name attribute (sessionName | sessionTag | sessionTimeout | downStreamBandwidth | upStreamBandwidth) {
    value;
}
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-name enterprise name device device-name schedule name event name action name attribute]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure subscription attributes. Subscription attributes apply only to service activations.

Options

Value

- *sessionName*— Name of the service session.
- *sessionTag*— Tag that can be used for accounting purposes.
- *sessionTimeout*— Session timeout to be used when the service is activated. The service session is deactivated when this timeout expires.
- *downStreamBandwidth*— Attribute used by SRC Admission Control Plug-In (SRC-ACP) to specify the rate of traffic between the network and the subscriber.
- *upStreamBandwidth*— Attribute used by SRC-ACP to specify the rate of traffic between the subscriber and the network.

value— Value of the specified subscription attribute.

Value— Depends on the specified subscription attribute

Default— No value

Editing Level—Basic

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* enterprise *name* device *device-name* schedule *name* event *name* except

Syntax

```
subscribers retailer name subscriber-folder folder-name enterprise name device device-name schedule name event name except name ...
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-name enterprise name device device-name schedule name event name except]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure an exclusion for the event.

Options

name name—Arbitrary identifier for exclusion rule.

Value—Text

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* enterprise *name* device *device-name* schedule *name* event *name* except *name* from

Syntax

```
subscribers retailer name subscriber-folder folder-
name enterprise name device device-
name schedule name event name except name from {
    hour hour;
    minute minute;
    day-of-month day-of-month;
    day-of-week day-of-week;
    month month;
    year year;
    time-zone time-zone;
}
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-
name enterprise name device device-
name schedule name event name except name from]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure the start time of the exclusion. For guidelines about entering time values, see the *SRC-PE Services and Policies Guide*.

Options

hour *hour*—(Optional) Hour of the day in the indicated month in which to schedule the event or exclusion.

Value— 0-23

Default— *

Editing Level—Basic

`minute` *minute*—(Optional) Minutes past the indicated hour in which to schedule the event or exclusion.

Value— 0-59

Default— *

Editing Level—Basic

`day-of-month` *day-of-month*—(Optional) Day of the month in which to schedule the event or exclusion. If you specify both `day-of-month` and `day-of-week`, `day-of-month` is used.

Value— 1-31

Default— *

Editing Level—Basic

`day-of-week` *day-of-week*—(Optional) Day of the week in which to schedule the event or exclusion. If you specify both `day-of-month` and `day-of-week`, `day-of-month` is used.

Value— 0-6, with 0 representing Sunday and each subsequent number representing the next day of the week

Default— *

Editing Level—Basic

`month` *month*—(Optional) Month of the year in which to schedule the event or exclusion.

Value— 1-12

Default— *

Editing Level—Basic

`year` *year*—(Optional) Year in which to schedule the event or exclusion.

Value— Four integers that indicate the year

Default— *

Editing Level—Basic

`time-zone` *time-zone*—(Optional) Name of the time zone to use in the schedule.

Value— One of the following values:

- *—Local time zone of the SAE
- An offset to GMT in the format: GMT (+ |-) (*hh:mm* | *hh mm* | *hh*)
 - *hh*—Hour of the day in the range of 0–23

- *mm*—Minutes past the hour in the range of 0–59

Default— *

Editing Level—Basic

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* enterprise *name* device *device-name* schedule *name* event *name* except *name* to

Syntax

```
subscribers retailer name subscriber-folder folder-name
enterprise name device device-name
schedule name event name except name to {
    hour hour;
    minute minute;
    day-of-month day-of-month;
    day-of-week day-of-week;
    month month;
    year year;
    time-zone time-zone;
}
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-name
enterprise name device device-name
schedule name event name except name to]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure the end time of the exclusion. For guidelines about entering time values, see the *SRC-PE Services and Policies Guide*.

These values apply only to services that have an authorization plug-in configured. If an authorization plug-in is not configured for the service associated with the schedule, these values are ignored.

Options

hour *hour*—(Optional) Hour of the day in the indicated month in which to schedule the event or exclusion.

Value— 0-23

Default— *

Editing Level—Basic

`minute` *minute*—(Optional) Minutes past the indicated hour in which to schedule the event or exclusion.

Value— 0-59

Default— *

Editing Level—Basic

`day-of-month` *day-of-month*—(Optional) Day of the month in which to schedule the event or exclusion. If you specify both `day-of-month` and `day-of-week`, `day-of-month` is used.

Value— 1-31

Default— *

Editing Level—Basic

`day-of-week` *day-of-week*—(Optional) Day of the week in which to schedule the event or exclusion. If you specify both `day-of-month` and `day-of-week`, `day-of-month` is used.

Value— 0-6, with 0 representing Sunday and each subsequent number representing the next day of the week

Default— *

Editing Level—Basic

`month` *month*—(Optional) Month of the year in which to schedule the event or exclusion.

Value— 1-12

Default— *

Editing Level—Basic

`year` *year*—(Optional) Year in which to schedule the event or exclusion.

Value— Four integers that indicate the year

Default— *

Editing Level—Basic

`time-zone` *time-zone*—(Optional) Name of the time zone to use in the schedule.

Value— One of the following values:

- *—Local time zone of the SAE
- An offset to GMT in the format: GMT (+ | -) (*hh:mm* | *hh mm* | *hh*)
 - *hh*—Hour of the day in the range of 0–23
 - *mm*—Minutes past the hour in the range of 0–59

Default— *

Editing Level—Basic

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* enterprise *name* device *device-name* schedule *name* event *name* from

Syntax

```
subscribers retailer name subscriber-folder folder-
name enterprise name device device-name schedule name event name from {
    effective effective;
    hour hour;
    minute minute;
    day-of-month day-of-month;
    day-of-week day-of-week;
    month month;
    year year;
    time-zone time-zone;
}
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-
name enterprise name device device-name schedule name event name from]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure the start time for the event. For guidelines about entering time values, see the *SRC-PE Services and Policies Guide*.

Options

effective effective—(Optional) Interval after the associated *from* or *to* time during which the scheduled action can be initiated by a subscriber who is logging in to a subscriber session.

Value— Number of minutes in the range 0-153722867280912

Default— *

Editing Level—Basic

hour *hour*—(Optional) Hour of the day in the indicated month in which to schedule the event or exclusion.

Value— 0-23
Default— *
Editing Level—Basic

minute *minute*—(Optional) Minutes past the indicated hour in which to schedule the event or exclusion.

Value— 0-59
Default— *
Editing Level—Basic

day-of-month *day-of-month*—(Optional) Day of the month in which to schedule the event or exclusion. If you specify both *day-of-month* and *day-of-week*, *day-of-month* is used.

Value— 1-31
Default— *
Editing Level—Basic

day-of-week *day-of-week*—(Optional) Day of the week in which to schedule the event or exclusion. If you specify both *day-of-month* and *day-of-week*, *day-of-month* is used.

Value— 0-6, with 0 representing Sunday and each subsequent number representing the next day of the week
Default— *
Editing Level—Basic

month *month*—(Optional) Month of the year in which to schedule the event or exclusion.

Value— 1-12
Default— *
Editing Level—Basic

year *year*—(Optional) Year in which to schedule the event or exclusion.

Value— Four integers that indicate the year
Default— *
Editing Level—Basic

`time-zone` *time-zone*—(Optional) Name of the time zone to use in the schedule.

Value— One of the following values:

- *—Local time zone of the SAE
- An offset to GMT in the format: GMT (+ | -) (*hh:mm* | *hh mm* | *hh*)
 - *hh*—Hour of the day in the range of 0–23
 - *mm*—Minutes past the hour in the range of 0–59

Default— *

Editing Level—Basic

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* enterprise *name* device *device-name* schedule *name* event *name* to

Syntax

```
subscribers retailer name subscriber-folder folder-name enterprise name device device-name schedule name event name to {
    effective effective;
    hour hour;
    minute minute;
    day-of-month day-of-month;
    day-of-week day-of-week;
    month month;
    year year;
    time-zone time-zone;
}
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-name enterprise name device device-name schedule name event name to]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure the end time for the event. For guidelines about entering time values, see the *SRC-PE Services and Policies Guide*.

These values apply only to services that have an authorization plug-in configured. If an authorization plug-in is not configured for the service associated with the schedule, these values are ignored.

Options

effective effective—(Optional) Interval after the associated *from* or *to* time during which the scheduled action can be initiated by a subscriber who is logging in to a subscriber session.

Value— Number of minutes in the range 0–153722867280912

Default— *

Editing Level—Basic

hour *hour*—(Optional) Hour of the day in the indicated month in which to schedule the event or exclusion.

Value— 0-23

Default— *

Editing Level—Basic

minute *minute*—(Optional) Minutes past the indicated hour in which to schedule the event or exclusion.

Value— 0-59

Default— *

Editing Level—Basic

day-of-month *day-of-month*—(Optional) Day of the month in which to schedule the event or exclusion. If you specify both *day-of-month* and *day-of-week*, *day-of-month* is used.

Value— 1-31

Default— *

Editing Level—Basic

day-of-week *day-of-week*—(Optional) Day of the week in which to schedule the event or exclusion. If you specify both *day-of-month* and *day-of-week*, *day-of-month* is used.

Value— 0-6, with 0 representing Sunday and each subsequent number representing the next day of the week

Default— *

Editing Level—Basic

month *month*—(Optional) Month of the year in which to schedule the event or exclusion.

Value— 1-12

Default— *

Editing Level—Basic

year *year*—(Optional) Year in which to schedule the event or exclusion.

Value— Four integers that indicate the year

Default— *
Editing Level—Basic

`time-zone` *time-zone*—(Optional) Name of the time zone to use in the schedule.

Value— One of the following values:

- *—Local time zone of the SAE
- An offset to GMT in the format: GMT (+ |-) (*hh:mm* | *hh mm* | *hh*)
 - *hh*—Hour of the day in the range of 0–23
 - *mm*—Minutes past the hour in the range of 0–59

Default— *
Editing Level—Basic

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* enterprise *name* device *device-name* subscription

Syntax

```
subscribers retailer name subscriber-folder folder-name enterprise name device device-name subscription subscription-name {
    status (active | suspended | hidden);
    activation (manual | automatically-on-login);
    activation-order activation-order;
    substitution [substitution...];
}
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-name enterprise name device device-name subscription]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure a service subscription.

Options

subscription-name *subscription-name*— Name of the service optionally followed by "*%subscription-id*". Use "*%subscription-id*" to subscribe subscribers to the same service multiple times with different subscription attributes.

Value— Text

status (active | suspended | hidden)— Status of the service subscription.

Value

- active— The subscriber can activate the subscription.
- suspended— The subscriber cannot activate the subscription, although it may be visible through the portal. If you change the status of the subscription to suspended while the subscription is active, the service is deactivated.

- **hidden**— Service is not available through a portal and cannot be activated automatically when the subscribers log in. If you change the status of the subscription to hidden while the subscription is active, the service is not deactivated.

Default— Active

Editing Level—Basic

`activation (manual | automatically-on-login)`— Specify how the service is activated.

Value

- **manual**— Subscriber must manually activate the service.
- **automatically-on-login**— Service is activated automatically when the subscriber logs in.

Default— Manual activation

Editing Level—Basic

`activation-order activation-order`—(Optional) Order in which subscriptions are automatically activated on login relative to the subscriber's other subscriptions that are configured to activate on login. Review all subscriptions that are configured to activate on login for the subscriber, and review the activation order for subscriptions of the parent subscribers. Assign the lowest number to the subscription that you want to activate first. Assign higher numbers to the other subscriptions in the order that you want the SAE to activate them. If you assign the same number to multiple subscriptions, the SAE activates them in an unspecified order.

Value— Integer in the range 0-21474863647

Default— 10000

Editing Level—Basic

`substitution [substitution...]`—(Optional) Actual values for parameters associated with this object. The policy engine substitutes parameters in policies associated with this object with the values that you specify in the substitution configuration.

Value— Substitution in the form `< parameter name> = < value>` . For example, `bandwidth= 1000000`.

Default— No value

Editing Level—Basic

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* enterprise *name* info

Syntax

```
subscribers retailer name subscriber-folder folder-name enterprise name info {
    phone phone;
    fax fax;
    po-box po-box;
    city city;
    street street;
    state state;
    postal-code postal-code;
}
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-name enterprise name info]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure additional information about the enterprise subscriber.

Options

phone *phone*—(Optional) Telephone number for the subscriber.

Value— Telephone number

Default— No value

Editing Level—Basic

fax *fax*—(Optional) Fax number for the subscriber.

Value— Fax number

Default— No value

Editing Level—Basic

`po-box` *po-box*—(Optional) Post office box for the subscriber.

Value— Post office box

Default— No value

Editing Level—Basic

`city` *city*—(Optional) City name for the subscriber.

Value— City name

Default— No value

Editing Level—Basic

`street` *street*—(Optional) Street address for the subscriber.

Value— Street address

Default— No value

Editing Level—Basic

`state` *state*—(Optional) State or province for the subscriber.

Value— State or province

Default— No value

Editing Level—Basic

`postal-code` *postal-code*—(Optional) Postal code for the subscriber.

Value— Postal code

Default— No value

Editing Level—Basic

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* enterprise *name* manager

Syntax

```
subscribers retailer name subscriber-folder folder-name enterprise name manager {
    role [(administrator | subscription | substitution | activation |
vpn)...];
    encrypted-password encrypted-password;
    plain-text-password;
    description description;
}
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-name enterprise name manager]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure a manager account.

Options

name *name*— Name of the manager account.

Value— Text

role [(administrator | subscription | substitution | activation | vpn)...]— Privilege level of the enterprise manager account. If you do not specify a privilege level, the manager has read-only access to associated objects.

Value

- administrator— Administrators have all privileges of the subscription, substitution, activation, and vpn roles. Additionally, administrators can create, delete, and modify other enterprise manager objects.

- `subscription`— Subscription managers can create, delete, modify, activate, and deactivate subscriptions.
- `substitution`— Substitution managers can modify policy parameters provided by subscriptions, enterprises, sites, and accesses.
- `activation`— Activation managers can activate and deactivate subscriptions.
- `vpn`— VPN managers can modify, export, and cancel the export of VPNs.

Default— No value

Editing Level—Basic

`encrypted-password` *encrypted-password*—(Optional) Login password and type of encryption.

Value— Enter a password, and select an encryption method that your directory supports.

- `crypt`—Style is `/etc/passwd`
- `sha`—Secure hash algorithm
- `md5`—Message digest #5

Default— No value

Editing Level—Basic

`plain-text-password`—(Optional) Plain text password. The password is encrypted using the algorithm defined in `system services editor password-encryption`.

Value— Text

Default— No value

Editing Level—Basic

`description` *description*—(Optional) Description of the object that you are configuring.

Value— Text

Default— No value

Editing Level—Basic

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* enterprise *name* schedule

Syntax

```
subscribers retailer name subscriber-folder folder-name enterprise name schedule name {  
    description description;  
}
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-name enterprise name schedule]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure a service schedule.

Options

name name— Name of service schedule.

Value—Text

description description—(Optional) Description of the service schedule.

Value—Text

Default— No value

Editing Level—Basic

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* enterprise *name* schedule *name* event

Syntax

```
subscribers retailer name subscriber-folder folder-name enterprise name schedule name event name ...
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-name enterprise name schedule name event]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure a scheduling event.

Options

name name— Name of the scheduling event.

Value—Text

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* enterprise *name* schedule *name* event *name* action

Syntax

```
subscribers retailer name subscriber-folder folder-  
name enterprise name schedule name event name action name {  
    type (activate | deactivate | deny | deny-deactivate);  
    service service;  
    substitution [substitution...];  
}
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-  
name enterprise name schedule name event name action]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure actions to perform for the scheduled event.

Options

name name— Arbitrary identifier for action.

Value—Text

type (activate | deactivate | deny | deny-deactivate)— Type of action.

Value

- activate— Activate service at the time specified in the entry schedule.
- deactivate— Deactivate service at the time specified in the entry schedule.
- deny— Deny new activation requests during the time specified in the entry schedule; current sessions are not affected. This value applies only to services that have an authorization plugin configured.

- `deny-deactivate`— Deny new activation requests during the time specified in the entry schedule; current sessions are deactivated at the specified time. This value applies only to services that have an authorization plug-in configured.

Default— No value

Editing Level—Basic

`service service`— Name of service affected by this action.

Value—Text

Default— No value

Editing Level—Basic

`substitution [substitution...]`—(Optional) Substitutions to be used when activating the service. Substitutions apply only to service activations.

Value— An entry in valid substitution format. See the *SRC-PE Services and Policies Guide*.

Default— No value

Editing Level—Basic

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* enterprise *name* schedule *name* event *name* action *name* attribute

Syntax

```
subscribers retailer name subscriber-folder folder-name enterprise name schedule name event name action name attribute (sessionName | sessionTag | sessionTimeout | downStreamBandwidth | upStreamBandwidth) {
    value;
}
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-name enterprise name schedule name event name action name attribute]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure subscription attributes. Subscription attributes apply only to service activations.

Options

Value

- *sessionName*— Name of the service session.
- *sessionTag*— Tag that can be used for accounting purposes.
- *sessionTimeout*— Session timeout to be used when the service is activated. The service session is deactivated when this timeout expires.
- *downStreamBandwidth*— Attribute used by SRC Admission Control Plug-In (SRC-ACP) to specify the rate of traffic between the network and the subscriber.
- *upStreamBandwidth*— Attribute used by SRC-ACP to specify the rate of traffic between the subscriber and the network.

value— Value of the specified subscription attribute.

Value— Depends on the specified subscription attribute

Default— No value

Editing Level—Basic

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* enterprise *name* schedule *name* event *name* except

Syntax

```
subscribers retailer name subscriber-folder folder-name enterprise name schedule name event name except name ...
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-name enterprise name schedule name event name except]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure an exclusion for the event.

Options

name name— Arbitrary identifier for exclusion rule.

Value—Text

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers *retailer name* subscriber-folder *folder-name* enterprise *name* schedule *name* event *name* except *name* from

Syntax

```
subscribers retailer name subscriber-folder folder-
name enterprise name schedule name event name except name from {
    hour hour;
    minute minute;
    day-of-month day-of-month;
    day-of-week day-of-week;
    month month;
    year year;
    time-zone time-zone;
}
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-
name enterprise name schedule name event name except name from]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure the start time of the exclusion. For guidelines about entering time values, see the *SRC-PE Services and Policies Guide*.

Options

hour *hour*—(Optional) Hour of the day in the indicated month in which to schedule the event or exclusion.

Value— 0-23

Default— *

Editing Level—Basic

minute *minute*—(Optional) Minutes past the indicated hour in which to schedule the event or exclusion.

Value— 0-59

Default— *

Editing Level—Basic

`day-of-month` *day-of-month*—(Optional) Day of the month in which to schedule the event or exclusion. If you specify both `day-of-month` and `day-of-week`, `day-of-month` is used.

Value— 1-31

Default— *

Editing Level—Basic

`day-of-week` *day-of-week*—(Optional) Day of the week in which to schedule the event or exclusion. If you specify both `day-of-month` and `day-of-week`, `day-of-month` is used.

Value— 0-6, with 0 representing Sunday and each subsequent number representing the next day of the week

Default— *

Editing Level—Basic

`month` *month*—(Optional) Month of the year in which to schedule the event or exclusion.

Value— 1-12

Default— *

Editing Level—Basic

`year` *year*—(Optional) Year in which to schedule the event or exclusion.

Value— Four integers that indicate the year

Default— *

Editing Level—Basic

`time-zone` *time-zone*—(Optional) Name of the time zone to use in the schedule.

Value— One of the following values:

- *—Local time zone of the SAE
- An offset to GMT in the format: GMT (+ | -) (*hh:mm* | *hh mm* | *hh*)
 - *hh*—Hour of the day in the range of 0-23
 - *mm*—Minutes past the hour in the range of 0-59

Default— *

Editing Level—Basic

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* enterprise *name* schedule *name* event *name* except *name* to

Syntax

```
subscribers retailer name subscriber-folder folder-name enterprise name schedule name event name except name to {
    hour hour;
    minute minute;
    day-of-month day-of-month;
    day-of-week day-of-week;
    month month;
    year year;
    time-zone time-zone;
}
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-name enterprise name schedule name event name except name to]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure the end time of the exclusion. For guidelines about entering time values, see the *SRC-PE Services and Policies Guide*.

These values apply only to services that have an authorization plug-in configured. If an authorization plug-in is not configured for the service associated with the schedule, these values are ignored.

Options

hour hour—(Optional) Hour of the day in the indicated month in which to schedule the event or exclusion.

Value— 0-23

Default— *

Editing Level—Basic

minute minute—(Optional) Minutes past the indicated hour in which to schedule the event or exclusion.

Value— 0-59
Default— *
Editing Level—Basic

`day-of-month` *day-of-month*—(Optional) Day of the month in which to schedule the event or exclusion. If you specify both `day-of-month` and `day-of-week`, `day-of-month` is used.

Value— 1-31
Default— *
Editing Level—Basic

`day-of-week` *day-of-week*—(Optional) Day of the week in which to schedule the event or exclusion. If you specify both `day-of-month` and `day-of-week`, `day-of-month` is used.

Value— 0-6, with 0 representing Sunday and each subsequent number representing the next day of the week
Default— *
Editing Level—Basic

`month` *month*—(Optional) Month of the year in which to schedule the event or exclusion.

Value— 1-12
Default— *
Editing Level—Basic

`year` *year*—(Optional) Year in which to schedule the event or exclusion.

Value— Four integers that indicate the year
Default— *
Editing Level—Basic

`time-zone` *time-zone*—(Optional) Name of the time zone to use in the schedule.

Value— One of the following values:

- *—Local time zone of the SAE
- An offset to GMT in the format: GMT (+ | -) (*hh:mm* | *hh mm* | *hh*)
 - *hh*—Hour of the day in the range of 0-23
 - *mm*—Minutes past the hour in the range of 0-59

Default—*
Editing Level—Basic

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* enterprise *name* schedule *name* event *name* from

Syntax

```
subscribers retailer name subscriber-folder folder-name enterprise name schedule name event name from {
    effective effective;
    hour hour;
    minute minute;
    day-of-month day-of-month;
    day-of-week day-of-week;
    month month;
    year year;
    time-zone time-zone;
}
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-name enterprise name schedule name event name from]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure the start time for the event. For guidelines about entering time values, see the *SRC-PE Services and Policies Guide*.

Options

effective effective—(Optional) Interval after the associated *from* or *to* time during which the scheduled action can be initiated by a subscriber who is logging in to a subscriber session.

Value— Number of minutes in the range 0–153722867280912

Default— *

Editing Level—Basic

hour hour—(Optional) Hour of the day in the indicated month in which to schedule the event or exclusion.

Value— 0-23
Default— *
Editing Level—Basic

minute *minute*—(Optional) Minutes past the indicated hour in which to schedule the event or exclusion.

Value— 0-59
Default— *
Editing Level—Basic

day-of-month *day-of-month*—(Optional) Day of the month in which to schedule the event or exclusion. If you specify both *day-of-month* and *day-of-week*, *day-of-month* is used.

Value— 1-31
Default— *
Editing Level—Basic

day-of-week *day-of-week*—(Optional) Day of the week in which to schedule the event or exclusion. If you specify both *day-of-month* and *day-of-week*, *day-of-month* is used.

Value— 0-6, with 0 representing Sunday and each subsequent number representing the next day of the week
Default— *
Editing Level—Basic

month *month*—(Optional) Month of the year in which to schedule the event or exclusion.

Value— 1-12
Default— *
Editing Level—Basic

year *year*—(Optional) Year in which to schedule the event or exclusion.

Value— Four integers that indicate the year
Default— *
Editing Level—Basic

time-zone *time-zone*—(Optional) Name of the time zone to use in the schedule.

Value— One of the following values:

- *—Local time zone of the SAE
- An offset to GMT in the format: GMT (+ |-) (*hh:mm* | *hh mm* | *hh*)
 - *hh*—Hour of the day in the range of 0–23
 - *mm*—Minutes past the hour in the range of 0–59

Default— *

Editing Level—Basic

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* enterprise *name* schedule *name* event *name* to

Syntax

```
subscribers retailer name subscriber-folder folder-
name enterprise name schedule name event name to {
    effective effective;
    hour hour;
    minute minute;
    day-of-month day-of-month;
    day-of-week day-of-week;
    month month;
    year year;
    time-zone time-zone;
}
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-
name enterprise name schedule name event name to]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure the end time for the event. For guidelines about entering time values, see the *SRC-PE Services and Policies Guide*.

These values apply only to services that have an authorization plug-in configured. If an authorization plug-in is not configured for the service associated with the schedule, these values are ignored.

Options

effective effective—(Optional) Interval after the associated *from* or *to* time during which the scheduled action can be initiated by a subscriber who is logging in to a subscriber session.

Value— Number of minutes in the range 0-153722867280912

Default— *

Editing Level—Basic

hour *hour*—(Optional) Hour of the day in the indicated month in which to schedule the event or exclusion.

Value— 0-23
Default— *
Editing Level—Basic

minute *minute*—(Optional) Minutes past the indicated hour in which to schedule the event or exclusion.

Value— 0-59
Default— *
Editing Level—Basic

day-of-month *day-of-month*—(Optional) Day of the month in which to schedule the event or exclusion. If you specify both *day-of-month* and *day-of-week*, *day-of-month* is used.

Value— 1-31
Default— *
Editing Level—Basic

day-of-week *day-of-week*—(Optional) Day of the week in which to schedule the event or exclusion. If you specify both *day-of-month* and *day-of-week*, *day-of-month* is used.

Value— 0-6, with 0 representing Sunday and each subsequent number representing the next day of the week
Default— *
Editing Level—Basic

month *month*—(Optional) Month of the year in which to schedule the event or exclusion.

Value— 1-12
Default— *
Editing Level—Basic

year *year*—(Optional) Year in which to schedule the event or exclusion.

Value— Four integers that indicate the year
Default— *
Editing Level—Basic

`time-zone` *time-zone*—(Optional) Name of the time zone to use in the schedule.

Value— One of the following values:

- *—Local time zone of the SAE
- An offset to GMT in the format: GMT (+ | -) (*hh:mm* | *hh mm* | *hh*)
 - *hh*—Hour of the day in the range of 0–23
 - *mm*—Minutes past the hour in the range of 0–59

Default— *

Editing Level—Basic

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* enterprise *name* site

Syntax

```
subscribers retailer name subscriber-folder folder-name enterprise name site {
    network [network...];
    display-name display-name;
    accounting-user-id accounting-user-id;
    description description;
}
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-name enterprise name site]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure an enterprise site.

Options

name *name*— Name of the site.

Value— Text

network [*network...*]—(Optional) Network used at the enterprise or site. If you build a custom enterprise manager application, you can access this information through the enterprise portal APIs.

Value— Network

Default— No value

Editing Level—Basic

display-name *display-name*—(Optional) Subscriber's name as it appears in portal applications. If you do not specify a display name, the value of the name option is used.

Value— Text
Default— No value
Editing Level—Basic

`accounting-user-id` *accounting-user-id*—(Optional) Value that identifies the subscriber in accounting records. For a household subscriber, all subordinate subscribers generally use the same ID. For an enterprise, all parts of the enterprise generally use the same ID.

Value— Text
Default— No value
Editing Level—Basic

`description` *description*—(Optional) Description of the object that you are configuring.

Value— Text
Default— No value
Editing Level—Basic

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* enterprise *name* site *name* access

Syntax

```
subscribers retailer name subscriber-folder folder-name enterprise name site name access name {
    routing-protocol routing-protocol;
    interface-alias interface-alias;
    interface-description interface-description;
    interface-name interface-name;
    unique-id unique-id;
    port-id port-id;
    device-name device-name;
    display-name display-name;
    accounting-user-id accounting-user-id;
    substitution [substitution...];
}
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-name enterprise name site name access]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure an access. You can configure an access for an enterprise or for a site. An access determines the way that the enterprise or site accesses Internet services, and specifies a set of services that are available to the enterprise or site.

Options

name name— Name of the access.

Value— Text

routing-protocol routing-protocol—(Optional) Routing protocol used at the enterprise or site. If you build a custom enterprise manager application, you can access this information through the enterprise portal APIs.

Value— Routing protocol

Default— No value

Editing Level—Basic

`interface-alias` *interface-alias*—(Optional) Description of the router interface. You can use this option to allow subscriber classification scripts to match interfaces reported from the network to be matched with the corresponding access.

Value— Interface description that is configured on the router.

Default— No value

Editing Level—Basic

`interface-description` *interface-description*—(Optional) Name of the interface that SNMP uses. You can use this option to allow subscriber classification scripts to match interfaces reported from the network to be matched with the corresponding access.

Value— One of the following:

- For JUNOSe routers, the format of the description is `ip< slot> / < port> .< subinterface>`
- On the JUNOS routing platform, interface description is the same as `interfaceName`

Default— No value

Editing Level—Basic

`interface-name` *interface-name*—(Optional) Name of the interface. You can use this option to allow subscriber classification scripts to match interfaces reported from the network to be matched with the corresponding access.

Value— One of the following:

- Name of the interface in your router CLI syntax.
- `FORWARDING_INTERFACE` for routing instance (used by traffic mirroring).

Default— No value

Editing Level—Basic

`unique-id` *unique-id*—(Optional) Unique identifier of the router. You can use this option to allow subscriber classification scripts to match interfaces reported from the

network to be matched with the corresponding access.

Value— Index of the router in the SNMP table for all interfaces.

Default— No value

Editing Level—Basic

`port-id` *port-id*—(Optional) NAS port ID reported by the JUNOSe router through COPS. You can use this option to allow subscriber classification scripts to match interfaces reported from the network to be matched with the corresponding access.

Value— Includes the interface name and additional layer 2 information.

Default— No value

Editing Level—Basic

`device-name` *device-name*—(Optional) Name of the router or other device.

Value— Name of the device

Default— No value

Editing Level—Basic

`display-name` *display-name*—(Optional) Subscriber's name as it appears in portal applications. If you do not specify a display name, the value of the name option is used.

Value— Text

Default— No value

Editing Level—Basic

`accounting-user-id` *accounting-user-id*—(Optional) Value that identifies the subscriber in accounting records. For a household subscriber, all subordinate subscribers generally use the same ID. For an enterprise, all parts of the enterprise generally use the same ID.

Value— Text

Default— No value

Editing Level—Basic

`substitution` [*substitution...*]—(Optional) Actual values for parameters associated with this object. The policy engine substitutes parameters in policies associated with this object with the values that you specify in the substitution configuration.

Value— Substitution in the form < parameter name> = < value> . For example, bandwidth= 1000000.

Default— No value

Editing Level—Basic

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* enterprise *name* site *name* access *name* admission-control

Syntax

```
subscribers retailer name subscriber-folder folder-name enterprise name site name access name admission-control {
    downstream-provisioned-rate downstream-provisioned-rate;
    upstream-provisioned-rate upstream-provisioned-rate;
    downstream-sync-rate downstream-sync-rate;
    upstream-sync-rate upstream-sync-rate;
    congestion-points [congestion-points...];
}
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-name enterprise name site name access name admission-control]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure bandwidths for subscribers that the SRC-ACP manages.

Options

`downstream-provisioned-rate` *downstream-provisioned-rate*—(Optional)
Provisioned downstream bandwidth. This rate is used if the subscriber bandwidth settings are not provided by the API for ACP or by the `downstream-sync-rate` option.

Value— Number of bps in the range 0–9223372036854775807

Default— No value

Editing Level—Basic

`upstream-provisioned-rate` *upstream-provisioned-rate*—(Optional)
Provisioned upstream bandwidth. This rate is used if the subscriber bandwidth settings are not provided by the API for ACP or by the `upstream-sync-rate` option.

Value— Number of bps in the range 0–9223372036854775807

Default— No value

Editing Level—Basic

`downstream-sync-rate` *downstream-sync-rate*—(Optional) Actual downstream bandwidth for the current subscriber session. If you do not set this value and it is not provided by the API for ACP, the value of the `downstream-provisioned-rate` option is used.

Value— Number of bps in the range 0–9223372036854775807

Default— No value

Editing Level—Basic

`upstream-sync-rate` *upstream-sync-rate*—(Optional) Actual upstream bandwidth for the current subscriber session. If you do not set this value and it is not provided by the API for ACP, the value of the `upstream-provisioned-rate` option is used.

Value— Number of bps in the range 0–9223372036854775807

Default— No value

Editing Level—Basic

`congestion-points` [*congestion-points...*]—(Optional) Congestion points for the subscriber.

Value— DN of interface associated with congestion point

Default— No value

Editing Level—Basic

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* enterprise *name* site *name* access *name* manager

Syntax

```
subscribers retailer name subscriber-folder folder-name enterprise name site name access name manager name {
    role [(administrator | subscription | substitution | activation | vpn)...];
    encrypted-password encrypted-password;
    plain-text-password;
    description description;
}
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-name enterprise name site name access name manager]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure a manager account.

Options

name name— Name of the manager account.

Value— Text

role [(administrator | subscription | substitution | activation | vpn) . . .]— Privilege level of the enterprise manager account. If you do not specify a privilege level, the manager has read-only access to associated objects.

Value

- *administrator*— Administrators have all privileges of the subscription, substitution, activation, and vpn roles. Additionally, administrators can create, delete, and modify other enterprise manager objects.

- `subscription`— Subscription managers can create, delete, modify, activate, and deactivate subscriptions.
- `substitution`— Substitution managers can modify policy parameters provided by subscriptions, enterprises, sites, and accesses.
- `activation`— Activation managers can activate and deactivate subscriptions.
- `vpn`— VPN managers can modify, export, and cancel the export of VPNs.

Default— No value

Editing Level—Basic

`encrypted-password` *encrypted-password*—(Optional) Login password and type of encryption.

Value— Enter a password, and select an encryption method that your directory supports.

- `crypt`—Style is `/etc/passwd`
- `sha`—Secure hash algorithm
- `md5`—Message digest #5

Default— No value

Editing Level—Basic

`plain-text-password`—(Optional) Plain text password. The password is encrypted using the algorithm defined in `system services editor password-encryption`.

Value— Text

Default— No value

Editing Level—Basic

`description` *description*—(Optional) Description of the object that you are configuring.

Value— Text

Default— No value

Editing Level—Basic

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* enterprise *name* site *name* access *name* schedule

Syntax

```
subscribers retailer name subscriber-folder folder-
name enterprise name site name access name schedule name {
    description description;
}
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-
name enterprise name site name access name schedule]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure a service schedule.

Options

name *name*— Name of service schedule.

Value—Text

description *description*—(Optional) Description of the service schedule.

Value—Text

Default— No value

Editing Level—Basic

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* enterprise *name* site *name* access *name* schedule *name* event

Syntax

```
subscribers retailer name subscriber-folder folder-name enterprise name site name access name schedule name event name ...
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-name enterprise name site name access name schedule name event]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure a scheduling event.

Options

name name— Name of the scheduling event.

Value—Text

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* enterprise *name* site *name* access *name* schedule *name* event *name* action

Syntax

```
subscribers retailer name subscriber-folder folder-name enterprise name site name access name schedule name event name action name {
    type (activate | deactivate | deny | deny-deactivate);
    service service;
    substitution [substitution...];
}
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-name enterprise name site name access name schedule name event name action]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure actions to perform for the scheduled event.

Options

name name— Arbitrary identifier for action.

Value—Text

type (activate | deactivate | deny | deny-deactivate)— Type of action.

Value

- activate— Activate service at the time specified in the entry schedule.
- deactivate— Deactivate service at the time specified in the entry schedule.
- deny— Deny new activation requests during the time specified in the entry schedule; current sessions are not affected. This value applies only to services that have an authorization plug-in configured.
- deny-deactivate— Deny new activation requests during the time specified in the entry schedule; current sessions are deactivated at the specified time. This value applies only to services that have an authorization plug-in configured.

Default— No value

Editing Level—Basic

service service— Name of service affected by this action.

Value—Text

Default— No value

Editing Level—Basic

substitution [*substitution...*]—(Optional) Substitutions to be used when activating the service. Substitutions apply only to service activations.

Value— An entry in valid substitution format. See the *SRC-PE Services and Policies Guide*.

Default— No value

Editing Level—Basic

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* enterprise *name* site *name* access *name* schedule *name* event *name* action *name* attribute

Syntax

```
subscribers retailer name subscriber-folder folder-
name enterprise name site name access name schedule name event name action name attribute (sessionName | sessionTag
| sessionTimeout | downStreamBandwidth | upStreamBandwidth) {
    value;
}
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-
name enterprise name site name access name schedule name event name action name attribute]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure subscription attributes. Subscription attributes apply only to service activations.

Options

Value

- `sessionName`— Name of the service session.
- `sessionTag`— Tag that can be used for accounting purposes.
- `sessionTimeout`— Session timeout to be used when the service is activated. The service session is deactivated when this timeout expires.
- `downStreamBandwidth`— Attribute used by SRC Admission Control Plug-In (SRC-ACP) to specify the rate of traffic between the network and the subscriber.
- `upStreamBandwidth`— Attribute used by SRC-ACP to specify the rate of traffic between the subscriber and the network.

`value`— Value of the specified subscription attribute.

Value— Depends on the specified subscription attribute

Default— No value

Editing Level—Basic

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* enterprise *name* site *name* access *name* schedule *name* event *name* except

Syntax

```
subscribers retailer name subscriber-folder folder-name enterprise name site name access name schedule name event name except name ...
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-name enterprise name site name access name schedule name event name except]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure an exclusion for the event.

Options

name name— Arbitrary identifier for exclusion rule.

Value—Text

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* enterprise *name* site *name* access *name* schedule *name* event *name* except *name* from

Syntax

```
subscribers retailer name subscriber-folder folder-
name enterprise name site name access name schedule name event name except name from {
    hour hour;
    minute minute;
    day-of-month day-of-month;
    day-of-week day-of-week;
    month month;
    year year;
    time-zone time-zone;
}
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-
name enterprise name site name access name schedule name event name except name from]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure the start time of the exclusion. For guidelines about entering time values, see the *SRC-PE Services and Policies Guide*.

Options

hour *hour*—(Optional) Hour of the day in the indicated month in which to schedule the event or exclusion.

Value— 0-23

Default— *

Editing Level—Basic

minute *minute*—(Optional) Minutes past the indicated hour in which to schedule the event or exclusion.

Value— 0-59

Default— *

Editing Level—Basic

day-of-month *day-of-month*—(Optional) Day of the month in which to schedule the event or exclusion. If you specify both day-of-month and day-of-week, day-of-month is used.

Value— 1-31

Default— *

Editing Level—Basic

day-of-week *day-of-week*—(Optional) Day of the week in which to schedule the event or exclusion. If you specify both day-of-month and day-of-week, day-of-month is used.

Value— 0-6, with 0 representing Sunday and each subsequent number representing the next day of the week

Default— *

Editing Level—Basic

month *month*—(Optional) Month of the year in which to schedule the event or exclusion.

Value— 1-12

Default— *

Editing Level—Basic

`year year`—(Optional) Year in which to schedule the event or exclusion.

Value— Four integers that indicate the year

Default— *

Editing Level—Basic

`time-zone time-zone`—(Optional) Name of the time zone to use in the schedule.

Value— One of the following values:

- *—Local time zone of the SAE
- An offset to GMT in the format: GMT (+ | -) (*hh:mm* | *hh mm* | *hh*)
 - *hh*—Hour of the day in the range of 0–23
 - *mm*—Minutes past the hour in the range of 0–59

Default— *

Editing Level—Basic

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* enterprise *name* site *name* access *name* schedule *name* event *name* except *name* to

Syntax

```
subscribers retailer name subscriber-folder folder-
name enterprise name site name access name schedule name event name except name to {
    hour hour;
    minute minute;
    day-of-month day-of-month;
    day-of-week day-of-week;
    month month;
    year year;
    time-zone time-zone;
}
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-
name enterprise name site name access name schedule name event name except name to]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure the end time of the exclusion. For guidelines about entering time values, see the *SRC-PE Services and Policies Guide*.

These values apply only to services that have an authorization plug-in configured. If an authorization plug-in is not configured for the service associated with the schedule, these values are ignored.

Options

hour *hour*—(Optional) Hour of the day in the indicated month in which to schedule the event or exclusion.

Value— 0-23

Default— *

Editing Level—Basic

minute *minute*—(Optional) Minutes past the indicated hour in which to schedule the event or exclusion.

Value— 0-59

Default— *

Editing Level—Basic

day-of-month *day-of-month*—(Optional) Day of the month in which to schedule the event or exclusion. If you specify both day-of-month and day-of-week, day-of-month is used.

Value— 1-31

Default— *

Editing Level—Basic

day-of-week *day-of-week*—(Optional) Day of the week in which to schedule the event or exclusion. If you specify both day-of-month and day-of-week, day-of-month is used.

Value— 0-6, with 0 representing Sunday and each subsequent number representing the next day of the week

Default— *
Editing Level—Basic

month *month*—(Optional) Month of the year in which to schedule the event or exclusion.

Value— 1-12
Default— *
Editing Level—Basic

year *year*—(Optional) Year in which to schedule the event or exclusion.

Value— Four integers that indicate the year
Default— *
Editing Level—Basic

time-zone *time-zone*—(Optional) Name of the time zone to use in the schedule.

Value— One of the following values:

- *—Local time zone of the SAE
- An offset to GMT in the format: GMT (+ |-) (*hh:mm* | *hh mm* | *hh*)
 - *hh*—Hour of the day in the range of 0-23
 - *mm*—Minutes past the hour in the range of 0-59

Default— *
Editing Level—Basic

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* enterprise *name* site *name* access *name* schedule *name* event *name* from

Syntax

```
subscribers retailer name subscriber-folder folder-name enterprise name site name access name schedule name event name from {
    effective effective;
    hour hour;
    minute minute;
    day-of-month day-of-month;
    day-of-week day-of-week;
    month month;
    year year;
    time-zone time-zone;
}
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-name enterprise name site name access name schedule name event name from]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure the start time for the event. For guidelines about entering time values, see the *SRC-PE Services and Policies Guide*.

Options

effective effective—(Optional) Interval after the associated *from* or *to* time during which the scheduled action can be initiated by a subscriber who is logging in to a subscriber session.

Value— Number of minutes in the range 0–153722867280912

Default— *

Editing Level—Basic

hour hour—(Optional) Hour of the day in the indicated month in which to schedule the event or exclusion.

Value— 0-23

Default— *

Editing Level—Basic

minute minute—(Optional) Minutes past the indicated hour in which to schedule the event or exclusion.

Value— 0-59

Default— *

Editing Level—Basic

`day-of-month` *day-of-month*—(Optional) Day of the month in which to schedule the event or exclusion. If you specify both `day-of-month` and `day-of-week`, `day-of-month` is used.

Value— 1-31

Default— *

Editing Level—Basic

`day-of-week` *day-of-week*—(Optional) Day of the week in which to schedule the event or exclusion. If you specify both `day-of-month` and `day-of-week`, `day-of-month` is used.

Value— 0-6, with 0 representing Sunday and each subsequent number representing the next day of the week

Default— *

Editing Level—Basic

`month` *month*—(Optional) Month of the year in which to schedule the event or exclusion.

Value— 1-12

Default— *

Editing Level—Basic

`year` *year*—(Optional) Year in which to schedule the event or exclusion.

Value— Four integers that indicate the year

Default— *

Editing Level—Basic

`time-zone` *time-zone*—(Optional) Name of the time zone to use in the schedule.

Value— One of the following values:

- *—Local time zone of the SAE
- An offset to GMT in the format: GMT (+ | -) (*hh:mm* | *hh mm* | *hh*)
 - *hh*—Hour of the day in the range of 0-23
 - *mm*—Minutes past the hour in the range of 0-59

Default— *

Editing Level—Basic

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* enterprise *name* site *name* access *name* schedule *name* event *name* to

Syntax

```
subscribers retailer name subscriber-folder folder-
name enterprise name site name access name schedule name event name to {
    effective effective;
    hour hour;
    minute minute;
    day-of-month day-of-month;
    day-of-week day-of-week;
    month month;
    year year;
    time-zone time-zone;
}
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-
name enterprise name site name access name schedule name event name to]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure the end time for the event. For guidelines about entering time values, see the *SRC-PE Services and Policies Guide*.

These values apply only to services that have an authorization plug-in configured. If an authorization plug-in is not configured for the service associated with the schedule, these values are ignored.

Options

effective *effective*—(Optional) Interval after the associated *from* or *to* time during which the scheduled action can be initiated by a subscriber who is logging in to a subscriber session.

Value— Number of minutes in the range 0-153722867280912

Default— *

Editing Level—Basic

hour *hour*—(Optional) Hour of the day in the indicated month in which to schedule the event or exclusion.

Value— 0-23

Default— *

Editing Level—Basic

minute *minute*—(Optional) Minutes past the indicated hour in which to schedule the event or exclusion.

Value— 0-59
Default— *
Editing Level—Basic

`day-of-month` *day-of-month*—(Optional) Day of the month in which to schedule the event or exclusion. If you specify both `day-of-month` and `day-of-week`, `day-of-month` is used.

Value— 1-31
Default— *
Editing Level—Basic

`day-of-week` *day-of-week*—(Optional) Day of the week in which to schedule the event or exclusion. If you specify both `day-of-month` and `day-of-week`, `day-of-month` is used.

Value— 0-6, with 0 representing Sunday and each subsequent number representing the next day of the week
Default— *
Editing Level—Basic

`month` *month*—(Optional) Month of the year in which to schedule the event or exclusion.

Value— 1-12
Default— *
Editing Level—Basic

`year` *year*—(Optional) Year in which to schedule the event or exclusion.

Value— Four integers that indicate the year
Default— *
Editing Level—Basic

`time-zone` *time-zone*—(Optional) Name of the time zone to use in the schedule.

Value— One of the following values:

- *—Local time zone of the SAE
- An offset to GMT in the format: GMT (+ |-) (*hh:mm* | *hh mm* | *hh*)
 - *hh*—Hour of the day in the range of 0-23
 - *mm*—Minutes past the hour in the range of 0-59

Default— *
Editing Level—Basic

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* enterprise *name* site *name* access *name* subscription

Syntax

```
subscribers retailer name subscriber-folder folder-name enterprise name site name access name subscription subscription-name {
    status (active | suspended | hidden);
    activation (manual | automatically-on-login);
    activation-order activation-order;
    substitution [substitution...];
}
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-name enterprise name site name access name subscription]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure a service subscription.

Options

subscription-name *subscription-name*— Name of the service optionally followed by "*%subscription-id*". Use "*%subscription-id*" to subscribe subscribers to the same service multiple times with different subscription attributes.

Value— Text

status (active | suspended | hidden)— Status of the service subscription.

Value

- active— The subscriber can activate the subscription.
- suspended— The subscriber cannot activate the subscription, although it may be visible through the portal. If you change the status of the subscription to suspended while the subscription is active, the service is deactivated.

- **hidden**— Service is not available through a portal and cannot be activated automatically when the subscribers log in. If you change the status of the subscription to hidden while the subscription is active, the service is not deactivated.

Default— Active

Editing Level—Basic

`activation (manual | automatically-on-login)`— Specify how the service is activated.

Value

- **manual**— Subscriber must manually activate the service.
- **automatically-on-login**— Service is activated automatically when the subscriber logs in.

Default— Manual activation

Editing Level—Basic

`activation-order activation-order`—(Optional) Order in which subscriptions are automatically activated on login relative to the subscriber's other subscriptions that are configured to activate on login. Review all subscriptions that are configured to activate on login for the subscriber, and review the activation order for subscriptions of the parent subscribers. Assign the lowest number to the subscription that you want to activate first. Assign higher numbers to the other subscriptions in the order that you want the SAE to activate them. If you assign the same number to multiple subscriptions, the SAE activates them in an unspecified order.

Value— Integer in the range 0-2147486367

Default— 10000

Editing Level—Basic

`substitution [substitution...]`—(Optional) Actual values for parameters associated with this object. The policy engine substitutes parameters in policies associated with this object with the values that you specify in the substitution configuration.

Value— Substitution in the form `< parameter name> = < value>` . For example, `bandwidth= 1000000`.

Default— No value

Editing Level—Basic

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* enterprise *name* site *name* device

Syntax

```
subscribers retailer name subscriber-folder folder-name enterprise name site name device device-name {
    display-name display-name;
    maximum-login maximum-login;
    accounting-user-id accounting-user-id;
    substitution [substitution...];
}
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-name enterprise name site name device]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure a device subscriber for subscriber sessions that manage the forwarding interface on JUNOS routing platforms and the router pseudo-subscriber on JUNOSe routers.

Options

device-name device-name— Name of the device subscriber.

Value— Text

display-name display-name—(Optional) Subscriber's name as it appears in portal applications. If you do not specify a display name, the value of the name option is used.

Value— Text

Default— No value

Editing Level—Basic

maximum-login maximum-login—(Optional) Maximum number of concurrent logins for subscribers associated with this object. By default, all subordinate objects use this

value. However, if you specify this value for a subordinate object, that object and its subordinate objects will use the subordinate's value.

Value— Integer in the range 0–2147483647

Default— No value

Editing Level—Basic

`accounting-user-id` *accounting-user-id*—(Optional) Value that identifies the subscriber in accounting records. For a household subscriber, all subordinate subscribers generally use the same ID. For an enterprise, all parts of the enterprise generally use the same ID.

Value— Text

Default— No value

Editing Level—Basic

`substitution` [*substitution...*]—(Optional) Actual values for parameters associated with this object. The policy engine substitutes parameters in policies associated with this object with the values that you specify in the substitution configuration.

Value— Substitution in the form `< parameter name> = < value>` . For example, `bandwidth= 1000000`.

Default— No value

Editing Level—Basic

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* enterprise *name* site *name* device *device-name* manager

Syntax

```
subscribers retailer name subscriber-folder folder-
name enterprise name site name device device-name manager name {
    role [(administrator | subscription | substitution | activation |
vpn)...];
    encrypted-password encrypted-password;
    plain-text-password;
    description description;
}
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-
name enterprise name site name device device-name manager]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure a manager account.

Options

name name— Name of the manager account.

Value— Text

role [(administrator | subscription | substitution | activation | vpn) . . .]— Privilege level of the enterprise manager account. If you do not specify a privilege level, the manager has read-only access to associated objects.

Value

- *administrator*— Administrators have all privileges of the subscription, substitution, activation, and vpn roles. Additionally, administrators can create, delete, and modify other enterprise manager objects.

- `subscription`— Subscription managers can create, delete, modify, activate, and deactivate subscriptions.
- `substitution`— Substitution managers can modify policy parameters provided by subscriptions, enterprises, sites, and accesses.
- `activation`— Activation managers can activate and deactivate subscriptions.
- `vpn`— VPN managers can modify, export, and cancel the export of VPNs.

Default— No value

Editing Level—Basic

`encrypted-password` *encrypted-password*—(Optional) Login password and type of encryption.

Value— Enter a password, and select an encryption method that your directory supports.

- `crypt`—Style is `/etc/passwd`
- `sha`—Secure hash algorithm
- `md5`—Message digest #5

Default— No value

Editing Level—Basic

`plain-text-password`—(Optional) Plain text password. The password is encrypted using the algorithm defined in `system services editor password-encryption`.

Value— Text

Default— No value

Editing Level—Basic

`description` *description*—(Optional) Description of the object that you are configuring.

Value— Text

Default— No value

Editing Level—Basic

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* enterprise *name* site *name* device *device-name* schedule

Syntax

```
subscribers retailer name subscriber-folder folder-
name enterprise name site name device device-name schedule name {
    description description;
}
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-
name enterprise name site name device device-name schedule]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure a service schedule.

Options

name *name*— Name of service schedule.

Value—Text

description *description*—(Optional) Description of the service schedule.

Value—Text

Default— No value

Editing Level—Basic

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* enterprise *name* site *name* device *device-name* schedule *name* event

Syntax

```
subscribers retailer name subscriber-folder folder-name enterprise name site name device device-name schedule name event name ...
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-name enterprise name site name device device-name schedule name event]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure a scheduling event.

Options

name name— Name of the scheduling event.

Value—Text

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* enterprise *name* site *name* device *device-name* schedule *name* event *name* action

Syntax

```
subscribers retailer name subscriber-folder folder-
name enterprise name site name device device-
name schedule name event name action name {
    type (activate | deactivate | deny | deny-deactivate);
    service service;
    substitution [substitution...];
}
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-
name enterprise name site name device device-
name schedule name event name action]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure actions to perform for the scheduled event.

Options

name name— Arbitrary identifier for action.

Value—Text

type (activate | deactivate | deny | deny-deactivate)— Type of action.

Value

- activate— Activate service at the time specified in the entry schedule.
- deactivate— Deactivate service at the time specified in the entry schedule.

- `deny`— Deny new activation requests during the time specified in the entry schedule; current sessions are not affected. This value applies only to services that have an authorization plug-in configured.
- `deny-deactivate`— Deny new activation requests during the time specified in the entry schedule; current sessions are deactivated at the specified time. This value applies only to services that have an authorization plug-in configured.

Default— No value

Editing Level—Basic

`service service`— Name of service affected by this action.

Value—Text

Default— No value

Editing Level—Basic

`substitution [substitution...]`—(Optional) Substitutions to be used when activating the service. Substitutions apply only to service activations.

Value— An entry in valid substitution format. See the *SRC-PE Services and Policies Guide*.

Default— No value

Editing Level—Basic

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* enterprise *name* site *name* device *device-name* schedule *name* event *name* action *name* attribute

Syntax

```
subscribers retailer name subscriber-folder folder-
name enterprise name site name device device-
name schedule name event name action name attribute (sessionName | sessionTag
| sessionTimeout | downStreamBandwidth | upStreamBandwidth) {
    value;
}
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-
name enterprise name site name device device-
name schedule name event name action name attribute]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure subscription attributes. Subscription attributes apply only to service activations.

Options

Value

- *sessionName*— Name of the service session.
- *sessionTag*— Tag that can be used for accounting purposes.
- *sessionTimeout*— Session timeout to be used when the service is activated. The service session is deactivated when this timeout expires.
- *downStreamBandwidth*— Attribute used by SRC Admission Control Plug-In (SRC-ACP) to specify the rate of traffic between the network and the subscriber.
- *upStreamBandwidth*— Attribute used by SRC-ACP to specify the rate of traffic between the subscriber and the network.

value— Value of the specified subscription attribute.

Value— Depends on the specified subscription attribute

Default— No value

Editing Level—Basic

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* enterprise *name* site *name* device *device-name* schedule *name* event *name* except

Syntax

```
subscribers retailer name subscriber-folder folder-name enterprise name site name device device-name schedule name event name except name ...
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-name enterprise name site name device device-name schedule name event name except]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure an exclusion for the event.

Options

name name— Arbitrary identifier for exclusion rule.

Value—Text

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* enterprise *name* site *name* device *device-name* schedule *name* event *name* except *name* from

Syntax

```
subscribers retailer name subscriber-folder folder-name
enterprise name site name device device-name
schedule name event name except name from {
    hour hour;
    minute minute;
    day-of-month day-of-month;
    day-of-week day-of-week;
    month month;
    year year;
    time-zone time-zone;
}
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-name
enterprise name site name device device-name
schedule name event name except name from]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure the start time of the exclusion. For guidelines about entering time values, see the *SRC-PE Services and Policies Guide*.

Options

hour *hour*—(Optional) Hour of the day in the indicated month in which to schedule the event or exclusion.

Value— 0-23

Default— *

Editing Level—Basic

`minute` *minute*—(Optional) Minutes past the indicated hour in which to schedule the event or exclusion.

Value— 0-59

Default— *

Editing Level—Basic

`day-of-month` *day-of-month*—(Optional) Day of the month in which to schedule the event or exclusion. If you specify both `day-of-month` and `day-of-week`, `day-of-month` is used.

Value— 1-31

Default— *

Editing Level—Basic

`day-of-week` *day-of-week*—(Optional) Day of the week in which to schedule the event or exclusion. If you specify both `day-of-month` and `day-of-week`, `day-of-month` is used.

Value— 0-6, with 0 representing Sunday and each subsequent number representing the next day of the week

Default— *

Editing Level—Basic

`month` *month*—(Optional) Month of the year in which to schedule the event or exclusion.

Value— 1-12

Default— *

Editing Level—Basic

`year` *year*—(Optional) Year in which to schedule the event or exclusion.

Value— Four integers that indicate the year

Default— *

Editing Level—Basic

`time-zone` *time-zone*—(Optional) Name of the time zone to use in the schedule.

Value— One of the following values:

- *—Local time zone of the SAE
- An offset to GMT in the format: GMT (+ |-) (*hh:mm* | *hh mm* | *hh*)
 - *hh*—Hour of the day in the range of 0–23

- *mm*—Minutes past the hour in the range of 0–59

Default— *

Editing Level—Basic

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* enterprise *name* site *name* device *device-name* schedule *name* event *name* except *name* to

Syntax

```
subscribers retailer name subscriber-folder folder-name
enterprise name site name device device-name
schedule name event name except name to {
    hour hour;
    minute minute;
    day-of-month day-of-month;
    day-of-week day-of-week;
    month month;
    year year;
    time-zone time-zone;
}
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-name
enterprise name site name device device-name
schedule name event name except name to]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure the end time of the exclusion. For guidelines about entering time values, see the *SRC-PE Services and Policies Guide*.

These values apply only to services that have an authorization plug-in configured. If an authorization plug-in is not configured for the service associated with the schedule, these values are ignored.

Options

hour *hour*—(Optional) Hour of the day in the indicated month in which to schedule the event or exclusion.

Value— 0-23

Default— *

Editing Level—Basic

`minute` *minute*—(Optional) Minutes past the indicated hour in which to schedule the event or exclusion.

Value— 0-59

Default— *

Editing Level—Basic

`day-of-month` *day-of-month*—(Optional) Day of the month in which to schedule the event or exclusion. If you specify both `day-of-month` and `day-of-week`, `day-of-month` is used.

Value— 1-31

Default— *

Editing Level—Basic

`day-of-week` *day-of-week*—(Optional) Day of the week in which to schedule the event or exclusion. If you specify both `day-of-month` and `day-of-week`, `day-of-month` is used.

Value— 0-6, with 0 representing Sunday and each subsequent number representing the next day of the week

Default— *

Editing Level—Basic

`month` *month*—(Optional) Month of the year in which to schedule the event or exclusion.

Value— 1-12

Default— *

Editing Level—Basic

`year` *year*—(Optional) Year in which to schedule the event or exclusion.

Value— Four integers that indicate the year

Default— *

Editing Level—Basic

`time-zone` *time-zone*—(Optional) Name of the time zone to use in the schedule.

Value— One of the following values:

- *—Local time zone of the SAE
- An offset to GMT in the format: GMT (+ | -) (*hh:mm* | *hh mm* | *hh*)
 - *hh*—Hour of the day in the range of 0–23
 - *mm*—Minutes past the hour in the range of 0–59

Default— *

Editing Level—Basic

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* enterprise *name* site *name* device *device-name* schedule *name* event *name* from

Syntax

```
subscribers retailer name subscriber-folder folder-name
enterprise name site name device device-name
schedule name event name from {
    effective effective;
    hour hour;
    minute minute;
    day-of-month day-of-month;
    day-of-week day-of-week;
    month month;
    year year;
    time-zone time-zone;
}
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-name
enterprise name site name device device-name
schedule name event name from]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure the start time for the event. For guidelines about entering time values, see the *SRC-PE Services and Policies Guide*.

Options

effective effective—(Optional) Interval after the associated *from* or *to* time during which the scheduled action can be initiated by a subscriber who is logging in to a subscriber session.

Value— Number of minutes in the range 0–153722867280912

Default— *

Editing Level—Basic

`hour` *hour*—(Optional) Hour of the day in the indicated month in which to schedule the event or exclusion.

Value— 0-23

Default— *

Editing Level—Basic

`minute` *minute*—(Optional) Minutes past the indicated hour in which to schedule the event or exclusion.

Value— 0-59

Default— *

Editing Level—Basic

`day-of-month` *day-of-month*—(Optional) Day of the month in which to schedule the event or exclusion. If you specify both `day-of-month` and `day-of-week`, `day-of-month` is used.

Value— 1-31

Default— *

Editing Level—Basic

`day-of-week` *day-of-week*—(Optional) Day of the week in which to schedule the event or exclusion. If you specify both `day-of-month` and `day-of-week`, `day-of-month` is used.

Value— 0-6, with 0 representing Sunday and each subsequent number representing the next day of the week

Default— *

Editing Level—Basic

`month` *month*—(Optional) Month of the year in which to schedule the event or exclusion.

Value— 1-12

Default— *

Editing Level—Basic

`year` *year*—(Optional) Year in which to schedule the event or exclusion.

Value— Four integers that indicate the year

Default— *

Editing Level—Basic

`time-zone` *time-zone*—(Optional) Name of the time zone to use in the schedule.

Value— One of the following values:

- *—Local time zone of the SAE
- An offset to GMT in the format: GMT (+ |-) (*hh:mm* | *hh mm* | *hh*)
 - *hh*—Hour of the day in the range of 0–23
 - *mm*—Minutes past the hour in the range of 0–59

Default— *

Editing Level—Basic

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* enterprise *name* site *name* device *device-name* schedule *name* event *name* to

Syntax

```
subscribers retailer name subscriber-folder folder-name enterprise name site name device device-name schedule name event name to {
    effective effective;
    hour hour;
    minute minute;
    day-of-month day-of-month;
    day-of-week day-of-week;
    month month;
    year year;
    time-zone time-zone;
}
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-name enterprise name site name device device-name schedule name event name to]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure the end time for the event. For guidelines about entering time values, see the *SRC-PE Services and Policies Guide*.

These values apply only to services that have an authorization plug-in configured. If an authorization plug-in is not configured for the service associated with the schedule, these values are ignored.

Options

effective effective—(Optional) Interval after the associated *from* or *to* time during which the scheduled action can be initiated by a subscriber who is logging in to a subscriber session.

Value— Number of minutes in the range 0–153722867280912

Default— *

Editing Level—Basic

hour *hour*—(Optional) Hour of the day in the indicated month in which to schedule the event or exclusion.

Value— 0-23

Default— *

Editing Level—Basic

minute *minute*—(Optional) Minutes past the indicated hour in which to schedule the event or exclusion.

Value— 0-59

Default— *

Editing Level—Basic

day-of-month *day-of-month*—(Optional) Day of the month in which to schedule the event or exclusion. If you specify both *day-of-month* and *day-of-week*, *day-of-month* is used.

Value— 1-31

Default— *

Editing Level—Basic

day-of-week *day-of-week*—(Optional) Day of the week in which to schedule the event or exclusion. If you specify both *day-of-month* and *day-of-week*, *day-of-month* is used.

Value— 0-6, with 0 representing Sunday and each subsequent number representing the next day of the week

Default— *

Editing Level—Basic

month *month*—(Optional) Month of the year in which to schedule the event or exclusion.

Value— 1-12

Default— *

Editing Level—Basic

year *year*—(Optional) Year in which to schedule the event or exclusion.

Value— Four integers that indicate the year

Default— *
Editing Level—Basic

`time-zone` *time-zone*—(Optional) Name of the time zone to use in the schedule.

Value— One of the following values:

- *—Local time zone of the SAE
- An offset to GMT in the format: GMT (+ |-) (*hh:mm* | *hh mm* | *hh*)
 - *hh*—Hour of the day in the range of 0–23
 - *mm*—Minutes past the hour in the range of 0–59

Default— *
Editing Level—Basic

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* enterprise *name* site *name* device *device-name* subscription

Syntax

```
subscribers retailer name subscriber-folder folder-name enterprise name site name device device-name subscription subscription-name {
    status (active | suspended | hidden);
    activation (manual | automatically-on-login);
    activation-order activation-order;
    substitution [substitution...];
}
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-name enterprise name site name device device-name subscription]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure a service subscription.

Options

subscription-name *subscription-name*— Name of the service optionally followed by "*%subscription-id*". Use "*%subscription-id*" to subscribe subscribers to the same service multiple times with different subscription attributes.

Value— Text

status (active | suspended | hidden)— Status of the service subscription.

Value

- active— The subscriber can activate the subscription.
- suspended— The subscriber cannot activate the subscription,

although it may be visible through the portal. If you change the status of the subscription to suspended while the subscription is active, the service is deactivated.

- **hidden**— Service is not available through a portal and cannot be activated automatically when the subscribers log in. If you change the status of the subscription to hidden while the subscription is active, the service is not deactivated.

Default— Active

Editing Level—Basic

`activation (manual | automatically-on-login)`— Specify how the service is activated.

Value

- **manual**— Subscriber must manually activate the service.
- **automatically-on-login**— Service is activated automatically when the subscriber logs in.

Default— Manual activation

Editing Level—Basic

`activation-order activation-order`—(Optional) Order in which subscriptions are automatically activated on login relative to the subscriber's other subscriptions that are configured to activate on login. Review all subscriptions that are configured to activate on login for the subscriber, and review the activation order for subscriptions of the parent subscribers. Assign the lowest number to the subscription that you want to activate first. Assign higher numbers to the other subscriptions in the order that you want the SAE to activate them. If you assign the same number to multiple subscriptions, the SAE activates them in an unspecified order.

Value— Integer in the range 0-2147486367

Default— 10000

Editing Level—Basic

`substitution [substitution...]`—(Optional) Actual values for parameters associated with this object. The policy engine substitutes parameters in policies associated with this object with the values that you specify in the substitution configuration.

Value— Substitution in the form `< parameter name> = < value>` . For example, `bandwidth= 1000000`.

Default— No value

Editing Level—Basic

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* enterprise *name* site *name* manager

Syntax

```
subscribers retailer name subscriber-folder folder-
name enterprise name site name manager name {
    role [(administrator | subscription | substitution | activation |
vpn)...];
    encrypted-password encrypted-password;
    plain-text-password;
    description description;
}
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-
name enterprise name site name manager]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure a manager account.

Options

name name— Name of the manager account.

Value— Text

role [(administrator | subscription | substitution | activation | vpn) . . .]— Privilege level of the enterprise manager account. If you do not specify a privilege level, the manager has read-only access to associated objects.

Value

- *administrator*— Administrators have all privileges of the subscription, substitution, activation, and vpn roles. Additionally, administrators can create, delete, and modify other enterprise manager objects.

- `subscription`— Subscription managers can create, delete, modify, activate, and deactivate subscriptions.
- `substitution`— Substitution managers can modify policy parameters provided by subscriptions, enterprises, sites, and accesses.
- `activation`— Activation managers can activate and deactivate subscriptions.
- `vpn`— VPN managers can modify, export, and cancel the export of VPNs.

Default— No value

Editing Level—Basic

`encrypted-password` *encrypted-password*—(Optional) Login password and type of encryption.

Value— Enter a password, and select an encryption method that your directory supports.

- `crypt`—Style is `/etc/passwd`
- `sha`—Secure hash algorithm
- `md5`—Message digest #5

Default— No value

Editing Level—Basic

`plain-text-password`—(Optional) Plain text password. The password is encrypted using the algorithm defined in `system services editor password-encryption`.

Value— Text

Default— No value

Editing Level—Basic

`description` *description*—(Optional) Description of the object that you are configuring.

Value— Text

Default— No value

Editing Level—Basic

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* enterprise *name* site *name* schedule

Syntax

```
subscribers retailer name subscriber-folder folder-name enterprise name site name schedule name {
    description description;
}
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-name enterprise name site name schedule]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure a service schedule.

Options

name *name*— Name of service schedule.

Value—Text

description *description*—(Optional) Description of the service schedule.

Value—Text

Default— No value

Editing Level—Basic

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* enterprise *name* site *name* schedule *name* event

Syntax

```
subscribers retailer name subscriber-folder folder-name enterprise name site name schedule name event name ...
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-name enterprise name site name schedule name event]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure a scheduling event.

Options

name name— Name of the scheduling event.

Value—Text

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* enterprise *name* site *name* schedule *name* event *name* action

Syntax

```
subscribers retailer name subscriber-folder folder-
name enterprise name site name schedule name event name action name {
    type (activate | deactivate | deny | deny-deactivate);
    service service;
    substitution [substitution...];
}
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-
name enterprise name site name schedule name event name action]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure actions to perform for the scheduled event.

Options

name name— Arbitrary identifier for action.

Value—Text

type (activate | deactivate | deny | deny-deactivate)— Type of action.

Value

- activate— Activate service at the time specified in the entry schedule.
- deactivate— Deactivate service at the time specified in the entry schedule.
- deny— Deny new activation requests during the time specified in the entry schedule; current sessions are not affected. This value applies only to services that have an authorization plug-in configured.
- deny-deactivate— Deny new activation requests during the

time specified in the entry schedule; current sessions are deactivated at the specified time. This value applies only to services that have an authorization plug-in configured.

Default— No value
Editing Level—Basic

`service service`— Name of service affected by this action.

Value—Text
Default— No value
Editing Level—Basic

`substitution [substitution...]`—(Optional) Substitutions to be used when activating the service. Substitutions apply only to service activations.

Value— An entry in valid substitution format. See the *SRC-PE Services and Policies Guide*.
Default— No value
Editing Level—Basic

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* enterprise *name* site *name* schedule *name* event *name* action *name* attribute

Syntax

```
subscribers retailer name subscriber-folder folder-name enterprise name site name schedule name event name action name attribute (sessionName | sessionTag | sessionTimeout | downStreamBandwidth | upStreamBandwidth) {
    value;
}
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-name enterprise name site name schedule name event name action name attribute]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure subscription attributes. Subscription attributes apply only to service activations.

Options

Value

- *sessionName*— Name of the service session.
- *sessionTag*— Tag that can be used for accounting purposes.
- *sessionTimeout*— Session timeout to be used when the service is activated. The service session is deactivated when this timeout expires.
- *downStreamBandwidth*— Attribute used by SRC Admission Control Plug-In (SRC-ACP) to specify the rate of traffic between the network and the subscriber.
- *upStreamBandwidth*— Attribute used by SRC-ACP to specify the rate of traffic between the subscriber and the network.

value— Value of the specified subscription attribute.

Value— Depends on the specified subscription attribute

Default— No value

Editing Level—Basic

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* enterprise *name* site *name* schedule *name* event *name* except

Syntax

```
subscribers retailer name subscriber-folder folder-name enterprise name site name schedule name event name except name ...
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-name enterprise name site name schedule name event name except]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure an exclusion for the event.

Options

name name— Arbitrary identifier for exclusion rule.

Value—Text

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* enterprise *name* site *name* schedule *name* event *name* except *name* from

Syntax

```
subscribers retailer name subscriber-folder folder-name enterprise name site name schedule name event name except name from {
    hour hour;
    minute minute;
    day-of-month day-of-month;
    day-of-week day-of-week;
    month month;
    year year;
    time-zone time-zone;
}
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-name enterprise name site name schedule name event name except name from]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure the start time of the exclusion. For guidelines about entering time values, see the *SRC-PE Services and Policies Guide*.

Options

hour *hour*—(Optional) Hour of the day in the indicated month in which to schedule the event or exclusion.

Value— 0-23

Default— *

Editing Level—Basic

minute *minute*—(Optional) Minutes past the indicated hour in which to schedule the event or exclusion.

Value— 0-59

Default— *

Editing Level—Basic

day-of-month *day-of-month*—(Optional) Day of the month in which to schedule the event or exclusion. If you specify both *day-of-month* and *day-of-week*, *day-of-month* is used.

Value— 1-31

Default— *

Editing Level—Basic

`day-of-week` *day-of-week*—(Optional) Day of the week in which to schedule the event or exclusion. If you specify both `day-of-month` and `day-of-week`, `day-of-month` is used.

Value— 0-6, with 0 representing Sunday and each subsequent number representing the next day of the week

Default— *

Editing Level—Basic

`month` *month*—(Optional) Month of the year in which to schedule the event or exclusion.

Value— 1-12

Default— *

Editing Level—Basic

`year` *year*—(Optional) Year in which to schedule the event or exclusion.

Value— Four integers that indicate the year

Default— *

Editing Level—Basic

`time-zone` *time-zone*—(Optional) Name of the time zone to use in the schedule.

Value— One of the following values:

- *—Local time zone of the SAE
- An offset to GMT in the format: GMT (+ |-) (*hh:mm* | *hh mm* | *hh*)
 - *hh*—Hour of the day in the range of 0-23
 - *mm*—Minutes past the hour in the range of 0-59

Default— *

Editing Level—Basic

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* enterprise *name* site *name* schedule *name* event *name* except *name* to

Syntax

```
subscribers retailer name subscriber-folder folder-
name enterprise name site name schedule name event name except name to {
    hour hour;
    minute minute;
    day-of-month day-of-month;
    day-of-week day-of-week;
    month month;
    year year;
    time-zone time-zone;
}
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-
name enterprise name site name schedule name event name except name to]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure the end time of the exclusion. For guidelines about entering time values, see the *SRC-PE Services and Policies Guide*.

These values apply only to services that have an authorization plug-in configured. If an authorization plug-in is not configured for the service associated with the schedule, these values are ignored.

Options

`hour hour`—(Optional) Hour of the day in the indicated month in which to schedule the event or exclusion.

Value— 0-23
Default— *
Editing Level—Basic

`minute minute`—(Optional) Minutes past the indicated hour in which to schedule the event or exclusion.

Value— 0-59
Default— *
Editing Level—Basic

`day-of-month day-of-month`—(Optional) Day of the month in which to schedule the event or exclusion. If you specify both `day-of-month` and `day-of-week`, `day-of-month` is used.

Value— 1-31
Default— *
Editing Level—Basic

day-of-week *day-of-week*—(Optional) Day of the week in which to schedule the event or exclusion. If you specify both *day-of-month* and *day-of-week*, *day-of-month* is used.

Value— 0-6, with 0 representing Sunday and each subsequent number representing the next day of the week
Default— *
Editing Level—Basic

month *month*—(Optional) Month of the year in which to schedule the event or exclusion.

Value— 1-12
Default— *
Editing Level—Basic

year *year*—(Optional) Year in which to schedule the event or exclusion.

Value— Four integers that indicate the year
Default— *
Editing Level—Basic

time-zone *time-zone*—(Optional) Name of the time zone to use in the schedule.

Value— One of the following values:

- *—Local time zone of the SAE
- An offset to GMT in the format: GMT (+ |-) (*hh:mm* | *hh mm* | *hh*)
 - *hh*—Hour of the day in the range of 0-23
 - *mm*—Minutes past the hour in the range of 0-59

Default— *
Editing Level—Basic

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* enterprise *name* site *name* schedule *name* event *name* from

Syntax

```
subscribers retailer name subscriber-folder folder-name enterprise name site name schedule name event name from {
    effective effective;
    hour hour;
    minute minute;
    day-of-month day-of-month;
    day-of-week day-of-week;
    month month;
    year year;
    time-zone time-zone;
}
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-name enterprise name site name schedule name event name from]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure the start time for the event. For guidelines about entering time values, see the *SRC-PE Services and Policies Guide*.

Options

effective effective—(Optional) Interval after the associated *from* or *to* time during which the scheduled action can be initiated by a subscriber who is logging in to a subscriber session.

Value— Number of minutes in the range 0-153722867280912

Default— *

Editing Level—Basic

hour hour—(Optional) Hour of the day in the indicated month in which to schedule the event or exclusion.

Value— 0-23
Default— *
Editing Level—Basic

`minute` *minute*—(Optional) Minutes past the indicated hour in which to schedule the event or exclusion.

Value— 0-59
Default— *
Editing Level—Basic

`day-of-month` *day-of-month*—(Optional) Day of the month in which to schedule the event or exclusion. If you specify both `day-of-month` and `day-of-week`, `day-of-month` is used.

Value— 1-31
Default— *
Editing Level—Basic

`day-of-week` *day-of-week*—(Optional) Day of the week in which to schedule the event or exclusion. If you specify both `day-of-month` and `day-of-week`, `day-of-month` is used.

Value— 0-6, with 0 representing Sunday and each subsequent number representing the next day of the week
Default— *
Editing Level—Basic

`month` *month*—(Optional) Month of the year in which to schedule the event or exclusion.

Value— 1-12
Default— *
Editing Level—Basic

`year` *year*—(Optional) Year in which to schedule the event or exclusion.

Value— Four integers that indicate the year
Default— *
Editing Level—Basic

`time-zone` *time-zone*—(Optional) Name of the time zone to use in the schedule.

Value— One of the following values:

- *—Local time zone of the SAE
- An offset to GMT in the format: GMT (+ |-) (*hh:mm* | *hh mm* | *hh*)
 - *hh*—Hour of the day in the range of 0-23
 - *mm*—Minutes past the hour in the range of 0-59

Default— *

Editing Level—Basic

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* enterprise *name* site *name* schedule *name* event *name* to

Syntax

```
subscribers retailer name subscriber-folder folder-
name enterprise name site name schedule name event name to {
    effective effective;
    hour hour;
    minute minute;
    day-of-month day-of-month;
    day-of-week day-of-week;
    month month;
    year year;
    time-zone time-zone;
}
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-
name enterprise name site name schedule name event name to]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure the end time for the event. For guidelines about entering time values, see the *SRC-PE Services and Policies Guide*.

These values apply only to services that have an authorization plug-in configured. If an authorization plug-in is not configured for the service associated with the schedule, these values are ignored.

Options

effective effective—(Optional) Interval after the associated *from* or *to* time during which the scheduled action can be initiated by a subscriber who is logging in to a subscriber session.

Value— Number of minutes in the range 0-153722867280912

Default— *

Editing Level—Basic

hour *hour*—(Optional) Hour of the day in the indicated month in which to schedule the event or exclusion.

Value— 0-23
Default— *
Editing Level—Basic

minute *minute*—(Optional) Minutes past the indicated hour in which to schedule the event or exclusion.

Value— 0-59
Default— *
Editing Level—Basic

day-of-month *day-of-month*—(Optional) Day of the month in which to schedule the event or exclusion. If you specify both *day-of-month* and *day-of-week*, *day-of-month* is used.

Value— 1-31
Default— *
Editing Level—Basic

day-of-week *day-of-week*—(Optional) Day of the week in which to schedule the event or exclusion. If you specify both *day-of-month* and *day-of-week*, *day-of-month* is used.

Value— 0-6, with 0 representing Sunday and each subsequent number representing the next day of the week
Default— *
Editing Level—Basic

month *month*—(Optional) Month of the year in which to schedule the event or exclusion.

Value— 1-12
Default— *
Editing Level—Basic

year *year*—(Optional) Year in which to schedule the event or exclusion.

Value— Four integers that indicate the year
Default— *
Editing Level—Basic

`time-zone` *time-zone*—(Optional) Name of the time zone to use in the schedule.

Value— One of the following values:

- *—Local time zone of the SAE
- An offset to GMT in the format: GMT (+ | -) (*hh:mm* | *hh mm* | *hh*)
 - *hh*—Hour of the day in the range of 0–23
 - *mm*—Minutes past the hour in the range of 0–59

Default— *

Editing Level—Basic

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* enterprise *name* site *name* subscription

Syntax

```
subscribers retailer name subscriber-folder folder-
name enterprise name site name subscription subscription-name {
    status (active | suspended | hidden);
    activation (manual | automatically-on-login);
    activation-order activation-order;
    substitution [substitution...];
}
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-
name enterprise name site name subscription]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure a service subscription.

Options

subscription-name *subscription-name*— Name of the service optionally followed by "%*subscription-id*". Use "%*subscription-id*" to subscribe subscribers to the same service multiple times with different subscription attributes.

Value— Text

status (active | suspended | hidden)— Status of the service subscription.

Value

- active— The subscriber can activate the subscription.
- suspended— The subscriber cannot activate the subscription, although it may be visible through the portal. If you change the status of the subscription to suspended while the subscription is active, the service is deactivated.

- **hidden**— Service is not available through a portal and cannot be activated automatically when the subscribers log in. If you change the status of the subscription to hidden while the subscription is active, the service is not deactivated.

Default— Active

Editing Level—Basic

`activation (manual | automatically-on-login)`— Specify how the service is activated.

Value

- **manual**— Subscriber must manually activate the service.
- **automatically-on-login**— Service is activated automatically when the subscriber logs in.

Default— Manual activation

Editing Level—Basic

`activation-order activation-order`—(Optional) Order in which subscriptions are automatically activated on login relative to the subscriber's other subscriptions that are configured to activate on login. Review all subscriptions that are configured to activate on login for the subscriber, and review the activation order for subscriptions of the parent subscribers. Assign the lowest number to the subscription that you want to activate first. Assign higher numbers to the other subscriptions in the order that you want the SAE to activate them. If you assign the same number to multiple subscriptions, the SAE activates them in an unspecified order.

Value— Integer in the range 0-21474863647

Default— 10000

Editing Level—Basic

`substitution [substitution...]`—(Optional) Actual values for parameters associated with this object. The policy engine substitutes parameters in policies associated with this object with the values that you specify in the substitution configuration.

Value— Substitution in the form `< parameter name> = < value>` . For example, `bandwidth= 1000000`.

Default— No value

Editing Level—Basic

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* enterprise *name* subscription

Syntax

```
subscribers retailer name subscriber-folder folder-name enterprise name subscription subscription-name {
    status (active | suspended | hidden);
    activation (manual | automatically-on-login);
    activation-order activation-order;
    substitution [substitution...];
}
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-name enterprise name subscription]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure a service subscription.

Options

subscription-name *subscription-name*— Name of the service optionally followed by "*%subscription-id*". Use "*%subscription-id*" to subscribe subscribers to the same service multiple times with different subscription attributes.

Value— Text

status (active | suspended | hidden)— Status of the service subscription.

Value

- active— The subscriber can activate the subscription.
- suspended— The subscriber cannot activate the subscription, although it may be visible through the portal. If you change the status of the subscription to suspended while the subscription is active, the service is deactivated.

- **hidden**— Service is not available through a portal and cannot be activated automatically when the subscribers log in. If you change the status of the subscription to hidden while the subscription is active, the service is not deactivated.

Default— Active

Editing Level—Basic

`activation (manual | automatically-on-login)`— Specify how the service is activated.

Value

- **manual**— Subscriber must manually activate the service.
- **automatically-on-login**— Service is activated automatically when the subscriber logs in.

Default— Manual activation

Editing Level—Basic

`activation-order activation-order`—(Optional) Order in which subscriptions are automatically activated on login relative to the subscriber's other subscriptions that are configured to activate on login. Review all subscriptions that are configured to activate on login for the subscriber, and review the activation order for subscriptions of the parent subscribers. Assign the lowest number to the subscription that you want to activate first. Assign higher numbers to the other subscriptions in the order that you want the SAE to activate them. If you assign the same number to multiple subscriptions, the SAE activates them in an unspecified order.

Value— Integer in the range 0-2147486367

Default— 10000

Editing Level—Basic

`substitution [substitution...]`—(Optional) Actual values for parameters associated with this object. The policy engine substitutes parameters in policies associated with this object with the values that you specify in the substitution configuration.

Value— Substitution in the form `< parameter name> = < value>` . For example, `bandwidth= 1000000`.

Default— No value

Editing Level—Basic

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* enterprise *name* vpn

Syntax

```
subscribers retailer name subscriber-folder folder-
name enterprise name vpn vpn-id {
    extranet-client [extranet-client...];
    display-name display-name;
    description description;
}
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-
name enterprise name vpn]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Add a VPN to the subscriber configuration.

Options

vpn-id *vpn-id*— Name of the routing instance on a JUNOS routing platform that implements the VPN.

Value— Text

extranet-client [*extranet-client...*]—(Optional) DN of a retailer or an enterprise that is an extranet client of this VPN.

Value— DN

Default— No value

Editing Level—Basic

display-name *display-name*—(Optional) Subscriber's name as it appears in portal applications. If you do not specify a display name, the value of the name option is used.

Value— Text
Default— No value
Editing Level—Basic

description *description*—(Optional) Description of the object that you are configuring.

Value— Text
Default— No value
Editing Level—Basic

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* manager

Syntax

```
subscribers retailer name subscriber-folder folder-name manager name {
    role [(administrator | subscription | substitution | activation |
vpn)...];
    encrypted-password encrypted-password;
    plain-text-password;
    description description;
}
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-name manager]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure a manager account.

Options

name name— Name of the manager account.

Value— Text

role [(administrator | subscription | substitution | activation | vpn)...]— Privilege level of the enterprise manager account. If you do not specify a privilege level, the manager has read-only access to associated objects.

Value

- *administrator*— Administrators have all privileges of the subscription, substitution, activation, and vpn roles. Additionally, administrators can create, delete, and modify other enterprise manager objects.
- *subscription*— Subscription managers can create, delete, modify, activate, and deactivate subscriptions.

- `substitution`— Substitution managers can modify policy parameters provided by subscriptions, enterprises, sites, and accesses.
- `activation`— Activation managers can activate and deactivate subscriptions.
- `vpn`— VPN managers can modify, export, and cancel the export of VPNs.

Default— No value

Editing Level—Basic

`encrypted-password` *encrypted-password*—(Optional) Login password and type of encryption.

Value— Enter a password, and select an encryption method that your directory supports.

- `crypt`—Style is `/etc/passwd`
- `sha`—Secure hash algorithm
- `md5`—Message digest #5

Default— No value

Editing Level—Basic

`plain-text-password`—(Optional) Plain text password. The password is encrypted using the algorithm defined in `system services editor password-encryption`.

Value— Text

Default— No value

Editing Level—Basic

`description` *description*—(Optional) Description of the object that you are configuring.

Value— Text

Default— No value

Editing Level—Basic

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* schedule

Syntax

```
subscribers retailer name subscriber-folder folder-name schedule name {
    description description;
}
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-name schedule]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure a service schedule.

Options

name *name*— Name of service schedule.

Value—Text

description *description*—(Optional) Description of the service schedule.

Value—Text

Default— No value

Editing Level—Basic

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* schedule *name* event

Syntax

```
subscribers retailer name subscriber-folder folder-name schedule name event name ...
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-name schedule name event]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure a scheduling event.

Options

name *name*— Name of the scheduling event.

Value—Text

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* schedule *name* event *name* action

Syntax

```
subscribers retailer name subscriber-folder folder-
name schedule name event name action name {
    type (activate | deactivate | deny | deny-deactivate);
    service service;
    substitution [substitution...];
}
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-
name schedule name event name action]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure actions to perform for the scheduled event.

Options

name name— Arbitrary identifier for action.

Value—Text

type (activate | deactivate | deny | deny-deactivate)— Type of action.

Value

- *activate*— Activate service at the time specified in the entry schedule.
- *deactivate*— Deactivate service at the time specified in the entry schedule.
- *deny*— Deny new activation requests during the time specified in the entry schedule; current sessions are not affected. This value applies only to services that have an authorization plugin configured.

- `deny-deactivate`— Deny new activation requests during the time specified in the entry schedule; current sessions are deactivated at the specified time. This value applies only to services that have an authorization plug-in configured.

Default— No value

Editing Level—Basic

`service service`— Name of service affected by this action.

Value—Text

Default— No value

Editing Level—Basic

`substitution [substitution...]`—(Optional) Substitutions to be used when activating the service. Substitutions apply only to service activations.

Value— An entry in valid substitution format. See the *SRC-PE Services and Policies Guide*.

Default— No value

Editing Level—Basic

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* schedule *name* event *name* action *name* attribute

Syntax

```
subscribers retailer name subscriber-folder folder-name schedule name event name action name attribute (sessionName | sessionTag | sessionTimeout | downStreamBandwidth | upStreamBandwidth) {
    value;
}
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-name schedule name event name action name attribute]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure subscription attributes. Subscription attributes apply only to service activations.

Options

Value

- *sessionName*— Name of the service session.
- *sessionTag*— Tag that can be used for accounting purposes.
- *sessionTimeout*— Session timeout to be used when the service is activated. The service session is deactivated when this timeout expires.
- *downStreamBandwidth*— Attribute used by SRC Admission Control Plug-In (SRC-ACP) to specify the rate of traffic between the network and the subscriber.
- *upStreamBandwidth*— Attribute used by SRC-ACP to specify the rate of traffic between the subscriber and the network.

value— Value of the specified subscription attribute.

Value— Depends on the specified subscription attribute

Default— No value

Editing Level—Basic

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* schedule *name* event *name* except

Syntax

```
subscribers retailer name subscriber-folder folder-name schedule name event name except name ...
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-name schedule name event name except]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure an exclusion for the event.

Options

name name—Arbitrary identifier for exclusion rule.

Value—Text

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* schedule *name* event *name* except *name* from

Syntax

```
subscribers retailer name subscriber-folder folder-
name schedule name event name except name from {
    hour hour;
    minute minute;
    day-of-month day-of-month;
    day-of-week day-of-week;
    month month;
    year year;
    time-zone time-zone;
}
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-
name schedule name event name except name from]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure the start time of the exclusion. For guidelines about entering time values, see the *SRC-PE Services and Policies Guide*.

Options

`hour hour`—(Optional) Hour of the day in the indicated month in which to schedule the event or exclusion.

Value— 0-23

Default— *

Editing Level—Basic

`minute minute`—(Optional) Minutes past the indicated hour in which to schedule the event or exclusion.

Value— 0-59

Default— *
Editing Level—Basic

`day-of-month` *day-of-month*—(Optional) Day of the month in which to schedule the event or exclusion. If you specify both `day-of-month` and `day-of-week`, `day-of-month` is used.

Value— 1-31
Default— *
Editing Level—Basic

`day-of-week` *day-of-week*—(Optional) Day of the week in which to schedule the event or exclusion. If you specify both `day-of-month` and `day-of-week`, `day-of-month` is used.

Value— 0-6, with 0 representing Sunday and each subsequent number representing the next day of the week
Default— *
Editing Level—Basic

`month` *month*—(Optional) Month of the year in which to schedule the event or exclusion.

Value— 1-12
Default— *
Editing Level—Basic

`year` *year*—(Optional) Year in which to schedule the event or exclusion.

Value— Four integers that indicate the year
Default— *
Editing Level—Basic

`time-zone` *time-zone*—(Optional) Name of the time zone to use in the schedule.

Value— One of the following values:

- *—Local time zone of the SAE
- An offset to GMT in the format: GMT (+ | -) (*hh:mm* | *hh mm* | *hh*)
 - *hh*—Hour of the day in the range of 0-23
 - *mm*—Minutes past the hour in the range of 0-59

Default— *

Editing Level—Basic

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* schedule *name* event *name* except *name* to

Syntax

```
subscribers retailer name subscriber-folder folder-
name schedule name event name except name to {
    hour hour;
    minute minute;
    day-of-month day-of-month;
    day-of-week day-of-week;
    month month;
    year year;
    time-zone time-zone;
}
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-
name schedule name event name except name to]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure the end time of the exclusion. For guidelines about entering time values, see the *SRC-PE Services and Policies Guide*.

These values apply only to services that have an authorization plug-in configured. If an authorization plug-in is not configured for the service associated with the schedule, these values are ignored.

Options

hour *hour*—(Optional) Hour of the day in the indicated month in which to schedule the event or exclusion.

Value— 0-23

Default— *

Editing Level—Basic

minute *minute*—(Optional) Minutes past the indicated hour in which to schedule the

event or exclusion.

Value— 0-59

Default— *

Editing Level—Basic

`day-of-month` *day-of-month*—(Optional) Day of the month in which to schedule the event or exclusion. If you specify both `day-of-month` and `day-of-week`, `day-of-month` is used.

Value— 1-31

Default— *

Editing Level—Basic

`day-of-week` *day-of-week*—(Optional) Day of the week in which to schedule the event or exclusion. If you specify both `day-of-month` and `day-of-week`, `day-of-month` is used.

Value— 0-6, with 0 representing Sunday and each subsequent number representing the next day of the week

Default— *

Editing Level—Basic

`month` *month*—(Optional) Month of the year in which to schedule the event or exclusion.

Value— 1-12

Default— *

Editing Level—Basic

`year` *year*—(Optional) Year in which to schedule the event or exclusion.

Value— Four integers that indicate the year

Default— *

Editing Level—Basic

`time-zone` *time-zone*—(Optional) Name of the time zone to use in the schedule.

Value— One of the following values:

- *—Local time zone of the SAE
- An offset to GMT in the format: GMT (+ | -) (*hh:mm* | *hh mm* | *hh*)
 - *hh*—Hour of the day in the range of 0-23
 - *mm*—Minutes past the hour in the range of 0-59

Default— *
Editing Level—Basic

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* schedule *name* event *name* from

Syntax

```
subscribers retailer name subscriber-folder folder-
name schedule name event name from {
    effective effective;
    hour hour;
    minute minute;
    day-of-month day-of-month;
    day-of-week day-of-week;
    month month;
    year year;
    time-zone time-zone;
}
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-
name schedule name event name from]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure the start time for the event. For guidelines about entering time values, see the *SRC-PE Services and Policies Guide*.

Options

effective effective—(Optional) Interval after the associated *from* or *to* time during which the scheduled action can be initiated by a subscriber who is logging in to a subscriber session.

Value— Number of minutes in the range 0–153722867280912

Default— *

Editing Level—Basic

hour hour—(Optional) Hour of the day in the indicated month in which to schedule the event or exclusion.

Value— 0-23
Default— *
Editing Level—Basic

minute *minute*—(Optional) Minutes past the indicated hour in which to schedule the event or exclusion.

Value— 0-59
Default— *
Editing Level—Basic

day-of-month *day-of-month*—(Optional) Day of the month in which to schedule the event or exclusion. If you specify both *day-of-month* and *day-of-week*, *day-of-month* is used.

Value— 1-31
Default— *
Editing Level—Basic

day-of-week *day-of-week*—(Optional) Day of the week in which to schedule the event or exclusion. If you specify both *day-of-month* and *day-of-week*, *day-of-month* is used.

Value— 0-6, with 0 representing Sunday and each subsequent number representing the next day of the week
Default— *
Editing Level—Basic

month *month*—(Optional) Month of the year in which to schedule the event or exclusion.

Value— 1-12
Default— *
Editing Level—Basic

year *year*—(Optional) Year in which to schedule the event or exclusion.

Value— Four integers that indicate the year
Default— *
Editing Level—Basic

time-zone *time-zone*—(Optional) Name of the time zone to use in the schedule.

Value— One of the following values:

- *—Local time zone of the SAE
- An offset to GMT in the format: GMT (+ |-) (*hh:mm* | *hh mm* | *hh*)
 - *hh*—Hour of the day in the range of 0–23
 - *mm*—Minutes past the hour in the range of 0–59

Default— *

Editing Level—Basic

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* schedule *name* event *name* to

Syntax

```
subscribers retailer name subscriber-folder folder-
name schedule name event name to {
    effective effective;
    hour hour;
    minute minute;
    day-of-month day-of-month;
    day-of-week day-of-week;
    month month;
    year year;
    time-zone time-zone;
}
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-
name schedule name event name to]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure the end time for the event. For guidelines about entering time values, see the *SRC-PE Services and Policies Guide*.

These values apply only to services that have an authorization plug-in configured. If an authorization plug-in is not configured for the service associated with the schedule, these values are ignored.

Options

effective effective—(Optional) Interval after the associated *from* or *to* time during which the scheduled action can be initiated by a subscriber who is logging in to a subscriber session.

Value— Number of minutes in the range 0-153722867280912

Default— *

Editing Level—Basic

hour *hour*—(Optional) Hour of the day in the indicated month in which to schedule the event or exclusion.

Value— 0-23
Default— *
Editing Level—Basic

minute *minute*—(Optional) Minutes past the indicated hour in which to schedule the event or exclusion.

Value— 0-59
Default— *
Editing Level—Basic

day-of-month *day-of-month*—(Optional) Day of the month in which to schedule the event or exclusion. If you specify both *day-of-month* and *day-of-week*, *day-of-month* is used.

Value— 1-31
Default— *
Editing Level—Basic

day-of-week *day-of-week*—(Optional) Day of the week in which to schedule the event or exclusion. If you specify both *day-of-month* and *day-of-week*, *day-of-month* is used.

Value— 0-6, with 0 representing Sunday and each subsequent number representing the next day of the week
Default— *
Editing Level—Basic

month *month*—(Optional) Month of the year in which to schedule the event or exclusion.

Value— 1-12
Default— *
Editing Level—Basic

year *year*—(Optional) Year in which to schedule the event or exclusion.

Value— Four integers that indicate the year
Default— *
Editing Level—Basic

`time-zone` *time-zone*—(Optional) Name of the time zone to use in the schedule.

Value— One of the following values:

- *—Local time zone of the SAE
- An offset to GMT in the format: GMT (+ | -) (*hh:mm* | *hh mm* | *hh*)
 - *hh*—Hour of the day in the range of 0–23
 - *mm*—Minutes past the hour in the range of 0–59

Default— *

Editing Level—Basic

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* subscriber

Syntax

```
subscribers retailer name subscriber-folder folder-name subscriber name {
    common-name common-name;
    surname surname;
    given-name given-name;
    initials initials;
    anonymous;
    ip-address ip-address;
    interface-name interface-name;
    maximum-login-group maximum-login-group;
    display-name display-name;
    encrypted-password encrypted-password;
    plain-text-password;
    maximum-login maximum-login;
    session-timeout session-timeout;
    accounting-user-id accounting-user-id;
    substitution [substitution...];
}
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-name subscriber]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure a residential subscriber. The SRC software uses the information in the subscriber definition to create a subscriber profile.

Options

name name— Name of the residential subscriber

Value— Text

common-name common-name— Name that defines the subscriber in the directory. The

value is not used directly by the SRC software, but it is not optional because it is required by the LDAP schema. The common name is available through SRC APIs.

Value— Text. Typically in the format `firstName lastName` or `lastname firstName`
Default— No value
Editing Level—Basic

`surname surname`— Subscriber's last name. The surname is not directly used by the SRC software, but it is not optional because it is required by the LDAP schema. The surname is available through SRC APIs.

Value— Text
Default— The default value is derived from the common-name option.
Editing Level—Basic

`given-name given-name`—(Optional) Subscriber's given name. The given name is not used directly by the SRC software, but it is available through SRC APIs.

Value— Text
Default— No value
Editing Level—Basic

`initials initials`—(Optional) Subscriber's initials. The initials are not used directly by the SRC software but are available through SRC APIs.

Value— Text
Default— No value
Editing Level—Basic

`anonymous`—(Optional) A flag that marks the subscriber profile as a shared profile. Shared profiles can be used by multiple subscriber sessions. The SAE API prevents subscribers from making changes to their profile if the profile is marked as anonymous.

Default— Disabled
Editing Level—Basic

`ip-address ip-address`—(Optional) IP address for subscribers who have fixed addresses, and for whom the SRC does not learn addresses through its management of routers or through calls to its notification API.

Value— IP address
Default— No value
Editing Level—Basic

`interface-name` *interface-name*—(Optional) Type and specifier of the router interface and virtual router that manage this subscriber. Use this option when you want the subscriber classification script to identify the subscriber entry in the directory based on the interface name received from the router.

Value— Interface as configured on the router. For example:

- For JUNOSe routers:
"fastethernet6/0.1@vrName@routerName"
- For JUNOS routing platforms: "fe-0/10.0@vrName@routerName"

Default— No value

Editing Level—Basic

`maximum-login-group` *maximum-login-group*—(Optional) Maximum number of concurrent logins for this subscriber and all subordinate objects; typically the maximum number of concurrent logins for a household.

Value— Integer in the range 0–2147483647

Default— No value

Editing Level—Basic

`display-name` *display-name*—(Optional) Subscriber's name as it appears in portal applications. If you do not specify a display name, the value of the name option is used.

Value— Text

Default— No value

Editing Level—Basic

`encrypted-password` *encrypted-password*—(Optional) Login password and type of encryption.

Value— Enter a password, and select an encryption method that your directory supports.

- crypt—Style is /etc/passwd
- sha—Secure hash algorithm
- md5—Message digest #5

Default— No value

Editing Level—Basic

`plain-text-password`—(Optional) Plain text password. The password is encrypted using the algorithm defined in `system services editor password-encryption`.

Value— Text
Default— No value
Editing Level—Basic

`maximum-login` *maximum-login*—(Optional) Maximum number of concurrent logins for subscribers associated with this object. By default, all subordinate objects use this value. However, if you specify this value for a subordinate object, that object and its subordinate objects will use the subordinate's value.

Value— Integer in the range 0-2147483647
Default— No value
Editing Level—Basic

`session-timeout` *session-timeout*—(Optional) Timeout for subscriber sessions. By default, all subordinate objects use this value. However, if you specify this value for a subordinate object, that object and its subordinate objects will use the subordinate's value.

Value— Number of seconds in the range 0-2147483647
Default— No value
Editing Level—Basic

`accounting-user-id` *accounting-user-id*—(Optional) Value that identifies the subscriber in accounting records. For a household subscriber, all subordinate subscribers generally use the same ID. For an enterprise, all parts of the enterprise generally use the same ID.

Value— Text
Default— No value
Editing Level—Basic

`substitution` [*substitution...*]—(Optional) Actual values for parameters associated with this object. The policy engine substitutes parameters in policies associated with this object with the values that you specify in the substitution configuration.

Value— Substitution in the form `< parameter name> = < value>` . For example, `bandwidth= 1000000`.
Default— No value
Editing Level—Basic

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* subscriber *name* admission-control

Syntax

```
subscribers retailer name subscriber-folder folder-name subscriber name admission-control {
    downstream-provisioned-rate downstream-provisioned-rate;
    upstream-provisioned-rate upstream-provisioned-rate;
    downstream-sync-rate downstream-sync-rate;
    upstream-sync-rate upstream-sync-rate;
    congestion-points [congestion-points...];
}
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-name subscriber name admission-control]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure bandwidths for subscribers that the SRC-ACP manages.

Options

`downstream-provisioned-rate` *downstream-provisioned-rate*—(Optional)
Provisioned downstream bandwidth. This rate is used if the subscriber bandwidth settings are not provided by the API for ACP or by the `downstream-sync-rate` option.

Value— Number of bps in the range 0–9223372036854775807

Default— No value

Editing Level—Basic

`upstream-provisioned-rate` *upstream-provisioned-rate*—(Optional)
Provisioned upstream bandwidth. This rate is used if the subscriber bandwidth settings are not provided by the API for ACP or by the `upstream-sync-rate` option.

Value— Number of bps in the range 0–9223372036854775807

Default— No value

Editing Level—Basic

`downstream-sync-rate` *downstream-sync-rate*—(Optional) Actual downstream bandwidth for the current subscriber session. If you do not set this value and it is not provided by the API for ACP, the value of the `downstream-provisioned-rate` option is used.

Value— Number of bps in the range 0–9223372036854775807

Default— No value

Editing Level—Basic

`upstream-sync-rate` *upstream-sync-rate*—(Optional) Actual upstream bandwidth for the current subscriber session. If you do not set this value and it is not provided by the API for ACP, the value of the `upstream-provisioned-rate` option is used.

Value— Number of bps in the range 0–9223372036854775807

Default— No value

Editing Level—Basic

`congestion-points` [*congestion-points...*]—(Optional) Congestion points for the subscriber.

Value— DN of interface associated with congestion point

Default— No value

Editing Level—Basic

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* subscriber *name* info

Syntax

```
subscribers retailer name subscriber-folder folder-name subscriber name info {
    home-phone home-phone;
    additional-phone additional-phone;
    fax fax;
    e-mail e-mail;
    city city;
    street street;
    postal-code postal-code;
    language language;
    job job;
    description description;
}
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-name subscriber name info]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure administrative information about the subscriber. The additional subscriber information is not used directly by the SRC software.

Options

`home-phone home-phone`—(Optional) Home telephone number of the subscriber.

Value— Telephone number

Default— No value

Editing Level—Basic

`additional-phone additional-phone`—(Optional) Additional telephone number for the subscriber.

Value— Telephone number

Default— No value

Editing Level—Basic

`fax fax`—(Optional) Fax number for the subscriber.

Value— Fax number

Default— No value

Editing Level—Basic

`e-mail e-mail`—(Optional) E-mail address for the subscriber.

Value— E-mail address

Default— No value

Editing Level—Basic

`city city`—(Optional) City name for the subscriber.

Value— City name

Default— No value

Editing Level—Basic

`street street`—(Optional) Street address for the subscriber.

Value— Street address

Default— No value

Editing Level—Basic

`postal-code postal-code`—(Optional) Postal code for the subscriber.

Value— Postal code

Default— No value

Editing Level—Basic

`language language`—(Optional) Preferred language for the subscriber.

Value— Language name

Default— No value

Editing Level—Basic

`job job`—(Optional) Job or business category for the subscriber.

Value— Job or business category
Default— No value
Editing Level—Basic

description *description*—(Optional) Description of the object that you are configuring.

Value— Text
Default— No value
Editing Level—Basic

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* subscriber *name* schedule

Syntax

```
subscribers retailer name subscriber-folder folder-name subscriber name schedule name {  
    description description;  
}
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-name subscriber name schedule]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure a service schedule.

Options

name name— Name of service schedule.

Value—Text

description description—(Optional) Description of the service schedule.

Value—Text

Default— No value

Editing Level—Basic

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* subscriber *name* schedule *name* event

Syntax

```
subscribers retailer name subscriber-folder folder-name subscriber name schedule name event name ...
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-name subscriber name schedule name event]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure a scheduling event.

Options

name name— Name of the scheduling event.

Value—Text

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* subscriber *name* schedule *name* event *name* action

Syntax

```
subscribers retailer name subscriber-folder folder-
name subscriber name schedule name event name action name {
    type (activate | deactivate | deny | deny-deactivate);
    service service;
    substitution [substitution...];
}
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-
name subscriber name schedule name event name action]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure actions to perform for the scheduled event.

Options

name name— Arbitrary identifier for action.

Value—Text

type (activate | deactivate | deny | deny-deactivate)— Type of action.

Value

- *activate*— Activate service at the time specified in the entry schedule.
- *deactivate*— Deactivate service at the time specified in the entry schedule.
- *deny*— Deny new activation requests during the time specified in the entry schedule; current sessions are not affected. This value applies only to services that have an authorization plugin configured.

- `deny-deactivate`— Deny new activation requests during the time specified in the entry schedule; current sessions are deactivated at the specified time. This value applies only to services that have an authorization plug-in configured.

Default— No value

Editing Level—Basic

`service service`— Name of service affected by this action.

Value—Text

Default— No value

Editing Level—Basic

`substitution [substitution...]`—(Optional) Substitutions to be used when activating the service. Substitutions apply only to service activations.

Value— An entry in valid substitution format. See the *SRC-PE Services and Policies Guide*.

Default— No value

Editing Level—Basic

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* subscriber *name* schedule *name* event *name* action *name* attribute

Syntax

```
subscribers retailer name subscriber-folder folder-
name subscriber name schedule name event name action name attribute (sessionName |
sessionTag | sessionTimeout | downStreamBandwidth | upStreamBandwidth) {
    value;
}
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-
name subscriber name schedule name event name action name attribute]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure subscription attributes. Subscription attributes apply only to service activations.

Options

Value

- `sessionName`— Name of the service session.
- `sessionTag`— Tag that can be used for accounting purposes.
- `sessionTimeout`— Session timeout to be used when the service is activated. The service session is deactivated when this timeout expires.
- `downStreamBandwidth`— Attribute used by SRC Admission Control Plug-In (SRC-ACP) to specify the rate of traffic between the network and the subscriber.
- `upStreamBandwidth`— Attribute used by SRC-ACP to specify the rate of traffic between the subscriber and the network.

value— Value of the specified subscription attribute.

Value— Depends on the specified subscription attribute

Default— No value

Editing Level—Basic

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* subscriber *name* schedule *name* event *name* except

Syntax

```
subscribers retailer name subscriber-folder folder-name subscriber name schedule name event name except name ...
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-name subscriber name schedule name event name except]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure an exclusion for the event.

Options

name name— Arbitrary identifier for exclusion rule.

Value—Text

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* subscriber *name* schedule *name* event *name* except *name* from

Syntax

```
subscribers retailer name subscriber-folder folder-name subscriber name schedule name event name except name from {
    hour hour;
    minute minute;
    day-of-month day-of-month;
    day-of-week day-of-week;
    month month;
    year year;
    time-zone time-zone;
}
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-name subscriber name schedule name event name except name from]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure the start time of the exclusion. For guidelines about entering time values, see the *SRC-PE Services and Policies Guide*.

Options

hour *hour*—(Optional) Hour of the day in the indicated month in which to schedule the event or exclusion.

Value— 0-23

Default— *

Editing Level—Basic

minute *minute*—(Optional) Minutes past the indicated hour in which to schedule the event or exclusion.

Value— 0-59

Default— *

Editing Level—Basic

`day-of-month` *day-of-month*—(Optional) Day of the month in which to schedule the event or exclusion. If you specify both `day-of-month` and `day-of-week`, `day-of-month` is used.

Value— 1-31
Default— *
Editing Level—Basic

`day-of-week` *day-of-week*—(Optional) Day of the week in which to schedule the event or exclusion. If you specify both `day-of-month` and `day-of-week`, `day-of-month` is used.

Value— 0-6, with 0 representing Sunday and each subsequent number representing the next day of the week
Default— *
Editing Level—Basic

`month` *month*—(Optional) Month of the year in which to schedule the event or exclusion.

Value— 1-12
Default— *
Editing Level—Basic

`year` *year*—(Optional) Year in which to schedule the event or exclusion.

Value— Four integers that indicate the year
Default— *
Editing Level—Basic

`time-zone` *time-zone*—(Optional) Name of the time zone to use in the schedule.

Value— One of the following values:

- *—Local time zone of the SAE
- An offset to GMT in the format: GMT (+ | -) (*hh:mm* | *hh mm* | *hh*)
 - *hh*—Hour of the day in the range of 0-23
 - *mm*—Minutes past the hour in the range of 0-59

Default— *
Editing Level—Basic

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* subscriber *name* schedule *name* event *name* except *name* to

Syntax

```
subscribers retailer name subscriber-folder folder-name subscriber name schedule name event name except name to {
    hour hour;
    minute minute;
    day-of-month day-of-month;
    day-of-week day-of-week;
    month month;
    year year;
    time-zone time-zone;
}
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-name subscriber name schedule name event name except name to]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure the end time of the exclusion. For guidelines about entering time values, see the *SRC-PE Services and Policies Guide*.

These values apply only to services that have an authorization plug-in configured. If an authorization plug-in is not configured for the service associated with the schedule, these values are ignored.

Options

`hour hour`—(Optional) Hour of the day in the indicated month in which to schedule the event or exclusion.

Value— 0-23

Default— *

Editing Level—Basic

`minute minute`—(Optional) Minutes past the indicated hour in which to schedule the event or exclusion.

Value— 0-59
Default— *
Editing Level—Basic

`day-of-month` *day-of-month*—(Optional) Day of the month in which to schedule the event or exclusion. If you specify both `day-of-month` and `day-of-week`, `day-of-month` is used.

Value— 1-31
Default— *
Editing Level—Basic

`day-of-week` *day-of-week*—(Optional) Day of the week in which to schedule the event or exclusion. If you specify both `day-of-month` and `day-of-week`, `day-of-month` is used.

Value— 0-6, with 0 representing Sunday and each subsequent number representing the next day of the week
Default— *
Editing Level—Basic

`month` *month*—(Optional) Month of the year in which to schedule the event or exclusion.

Value— 1-12
Default— *
Editing Level—Basic

`year` *year*—(Optional) Year in which to schedule the event or exclusion.

Value— Four integers that indicate the year
Default— *
Editing Level—Basic

`time-zone` *time-zone*—(Optional) Name of the time zone to use in the schedule.

Value— One of the following values:

- *—Local time zone of the SAE
- An offset to GMT in the format: GMT (+ | -) (*hh:mm* | *hh mm* | *hh*)
 - *hh*—Hour of the day in the range of 0-23
 - *mm*—Minutes past the hour in the range of 0-59

Default— *

Editing Level—Basic

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* subscriber *name* schedule *name* event *name* from

Syntax

```
subscribers retailer name subscriber-folder folder-
name subscriber name schedule name event name from {
    effective effective;
    hour hour;
    minute minute;
    day-of-month day-of-month;
    day-of-week day-of-week;
    month month;
    year year;
    time-zone time-zone;
}
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-
name subscriber name schedule name event name from]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure the start time for the event. For guidelines about entering time values, see the *SRC-PE Services and Policies Guide*.

Options

effective effective—(Optional) Interval after the associated *from* or *to* time during which the scheduled action can be initiated by a subscriber who is logging in to a subscriber session.

Value— Number of minutes in the range 0–153722867280912

Default— *

Editing Level—Basic

hour hour—(Optional) Hour of the day in the indicated month in which to schedule the event or exclusion.

Value— 0-23
Default— *
Editing Level—Basic

minute *minute*—(Optional) Minutes past the indicated hour in which to schedule the event or exclusion.

Value— 0-59
Default— *
Editing Level—Basic

day-of-month *day-of-month*—(Optional) Day of the month in which to schedule the event or exclusion. If you specify both *day-of-month* and *day-of-week*, *day-of-month* is used.

Value— 1-31
Default— *
Editing Level—Basic

day-of-week *day-of-week*—(Optional) Day of the week in which to schedule the event or exclusion. If you specify both *day-of-month* and *day-of-week*, *day-of-month* is used.

Value— 0-6, with 0 representing Sunday and each subsequent number representing the next day of the week
Default— *
Editing Level—Basic

month *month*—(Optional) Month of the year in which to schedule the event or exclusion.

Value— 1-12
Default— *
Editing Level—Basic

year *year*—(Optional) Year in which to schedule the event or exclusion.

Value— Four integers that indicate the year
Default— *
Editing Level—Basic

time-zone *time-zone*—(Optional) Name of the time zone to use in the schedule.

Value— One of the following values:

- *—Local time zone of the SAE
- An offset to GMT in the format: GMT (+ |-) (*hh:mm* | *hh mm* | *hh*)
 - *hh*—Hour of the day in the range of 0–23
 - *mm*—Minutes past the hour in the range of 0–59

Default— *

Editing Level—Basic

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* subscriber *name* schedule *name* event *name* to

Syntax

```
subscribers retailer name subscriber-folder folder-name subscriber name schedule name event name to {
    effective effective;
    hour hour;
    minute minute;
    day-of-month day-of-month;
    day-of-week day-of-week;
    month month;
    year year;
    time-zone time-zone;
}
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-name subscriber name schedule name event name to]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure the end time for the event. For guidelines about entering time values, see the *SRC-PE Services and Policies Guide*.

These values apply only to services that have an authorization plug-in configured. If an authorization plug-in is not configured for the service associated with the schedule, these values are ignored.

Options

effective effective—(Optional) Interval after the associated *from* or *to* time during which the scheduled action can be initiated by a subscriber who is logging in to a subscriber session.

Value— Number of minutes in the range 0-153722867280912

Default— *

Editing Level—Basic

hour *hour*—(Optional) Hour of the day in the indicated month in which to schedule the event or exclusion.

Value— 0-23
Default— *
Editing Level—Basic

minute *minute*—(Optional) Minutes past the indicated hour in which to schedule the event or exclusion.

Value— 0-59
Default— *
Editing Level—Basic

day-of-month *day-of-month*—(Optional) Day of the month in which to schedule the event or exclusion. If you specify both *day-of-month* and *day-of-week*, *day-of-month* is used.

Value— 1-31
Default— *
Editing Level—Basic

day-of-week *day-of-week*—(Optional) Day of the week in which to schedule the event or exclusion. If you specify both *day-of-month* and *day-of-week*, *day-of-month* is used.

Value— 0-6, with 0 representing Sunday and each subsequent number representing the next day of the week
Default— *
Editing Level—Basic

month *month*—(Optional) Month of the year in which to schedule the event or exclusion.

Value— 1-12
Default— *
Editing Level—Basic

year *year*—(Optional) Year in which to schedule the event or exclusion.

Value— Four integers that indicate the year
Default— *
Editing Level—Basic

`time-zone` *time-zone*—(Optional) Name of the time zone to use in the schedule.

Value— One of the following values:

- *—Local time zone of the SAE
- An offset to GMT in the format: GMT (+ | -) (*hh:mm* | *hh mm* | *hh*)
 - *hh*—Hour of the day in the range of 0–23
 - *mm*—Minutes past the hour in the range of 0–59

Default— *

Editing Level—Basic

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* subscriber *name* subscription

Syntax

```
subscribers retailer name subscriber-folder folder-name subscriber name subscription subscription-name {
    status (active | suspended | hidden);
    activation (manual | automatically-on-login);
    activation-order activation-order;
    substitution [substitution...];
}
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-name subscriber name subscription]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure a service subscription.

Options

subscription-name *subscription-name*— Name of the service optionally followed by "%*subscription-id*". Use "%*subscription-id*" to subscribe subscribers to the same service multiple times with different subscription attributes.

Value— Text

status (active | suspended | hidden)— Status of the service subscription.

Value

- active— The subscriber can activate the subscription.
- suspended— The subscriber cannot activate the subscription, although it may be visible through the portal. If you change the status of the subscription to suspended while the subscription is active, the service is deactivated.

- **hidden**— Service is not available through a portal and cannot be activated automatically when the subscribers log in. If you change the status of the subscription to hidden while the subscription is active, the service is not deactivated.

Default— Active

Editing Level—Basic

`activation (manual | automatically-on-login)`— Specify how the service is activated.

Value

- **manual**— Subscriber must manually activate the service.
- **automatically-on-login**— Service is activated automatically when the subscriber logs in.

Default— Manual activation

Editing Level—Basic

`activation-order activation-order`—(Optional) Order in which subscriptions are automatically activated on login relative to the subscriber's other subscriptions that are configured to activate on login. Review all subscriptions that are configured to activate on login for the subscriber, and review the activation order for subscriptions of the parent subscribers. Assign the lowest number to the subscription that you want to activate first. Assign higher numbers to the other subscriptions in the order that you want the SAE to activate them. If you assign the same number to multiple subscriptions, the SAE activates them in an unspecified order.

Value— Integer in the range 0-21474863647

Default— 10000

Editing Level—Basic

`substitution [substitution...]`—(Optional) Actual values for parameters associated with this object. The policy engine substitutes parameters in policies associated with this object with the values that you specify in the substitution configuration.

Value— Substitution in the form `< parameter name> = < value>` . For example, `bandwidth= 1000000`.

Default— No value

Editing Level—Basic

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscriber-folder *folder-name* subscription

Syntax

```
subscribers retailer name subscriber-folder folder-name subscription subscription-name {
    status (active | suspended | hidden);
    activation (manual | automatically-on-login);
    activation-order activation-order;
    substitution [substitution...];
}
```

Hierarchy Level

```
[edit subscribers retailer name subscriber-folder folder-name subscription]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure a service subscription.

Options

subscription-name *subscription-name*— Name of the service optionally followed by "%*subscription-id*". Use "%*subscription-id*" to subscribe subscribers to the same service multiple times with different subscription attributes.

Value— Text

status (active | suspended | hidden)— Status of the service subscription.

Value

- active— The subscriber can activate the subscription.
- suspended— The subscriber cannot activate the subscription, although it may be visible through the portal. If you change the status of the subscription to suspended while the subscription is active, the service is deactivated.
- hidden— Service is not available through a portal and cannot

be activated automatically when the subscribers log in. If you change the status of the subscription to hidden while the subscription is active, the service is not deactivated.

Default— Active

Editing Level—Basic

`activation` (`manual` | `automatically-on-login`)— Specify how the service is activated.

Value

- `manual`— Subscriber must manually activate the service.
- `automatically-on-login`— Service is activated automatically when the subscriber logs in.

Default— Manual activation

Editing Level—Basic

`activation-order` *activation-order*—(Optional) Order in which subscriptions are automatically activated on login relative to the subscriber's other subscriptions that are configured to activate on login. Review all subscriptions that are configured to activate on login for the subscriber, and review the activation order for subscriptions of the parent subscribers. Assign the lowest number to the subscription that you want to activate first. Assign higher numbers to the other subscriptions in the order that you want the SAE to activate them. If you assign the same number to multiple subscriptions, the SAE activates them in an unspecified order.

Value— Integer in the range 0-2147486367

Default— 10000

Editing Level—Basic

`substitution` [*substitution...*]—(Optional) Actual values for parameters associated with this object. The policy engine substitutes parameters in policies associated with this object with the values that you specify in the substitution configuration.

Value— Substitution in the form `< parameter name > = < value >` . For example, `bandwidth= 1000000`.

Default— No value

Editing Level—Basic

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* subscription

Syntax

```
subscribers retailer name subscription subscription-name {
    status (active | suspended | hidden);
    activation (manual | automatically-on-login);
    activation-order activation-order;
    substitution [substitution...];
}
```

Hierarchy Level

```
[edit subscribers retailer name subscription]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure a service subscription.

Options

subscription-name *subscription-name*— Name of the service optionally followed by "%*subscription-id*". Use "%*subscription-id*" to subscribe subscribers to the same service multiple times with different subscription attributes.

Value— Text

status (active | suspended | hidden)— Status of the service subscription.

Value

- active— The subscriber can activate the subscription.
- suspended— The subscriber cannot activate the subscription, although it may be visible through the portal. If you change the status of the subscription to suspended while the subscription is active, the service is deactivated.
- hidden— Service is not available through a portal and cannot be activated automatically when the subscribers log in. If you change the status of the subscription to hidden while the subscription is active, the service is not deactivated.

Default— Active

Editing Level—Basic

`activation` (`manual` | `automatically-on-login`)— Specify how the service is activated.

Value

- `manual`— Subscriber must manually activate the service.
- `automatically-on-login`— Service is activated automatically when the subscriber logs in.

Default— Manual activation

Editing Level—Basic

`activation-order` *activation-order*—(Optional) Order in which subscriptions are automatically activated on login relative to the subscriber's other subscriptions that are configured to activate on login. Review all subscriptions that are configured to activate on login for the subscriber, and review the activation order for subscriptions of the parent subscribers. Assign the lowest number to the subscription that you want to activate first. Assign higher numbers to the other subscriptions in the order that you want the SAE to activate them. If you assign the same number to multiple subscriptions, the SAE activates them in an unspecified order.

Value— Integer in the range 0-2147486367

Default— 10000

Editing Level—Basic

`substitution` [*substitution...*]—(Optional) Actual values for parameters associated with this object. The policy engine substitutes parameters in policies associated with this object with the values that you specify in the substitution configuration.

Value— Substitution in the form `< parameter name> = < value>` . For example, `bandwidth= 1000000`.

Default— No value

Editing Level—Basic

Required Privilege Level

subscriber

Required Editing Level

Basic

subscribers retailer *name* vpn

Syntax

```
subscribers retailer name vpn vpn-id {
    extranet-client [extranet-client...];
    display-name display-name;
    description description;
}
```

Hierarchy Level

```
[edit subscribers retailer name vpn]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Add a VPN to the subscriber configuration.

Options

vpn-id *vpn-id*— Name of the routing instance on a JUNOS routing platform that implements the VPN.

Value— Text

extranet-client [*extranet-client...*]—(Optional) DN of a retailer or an enterprise that is an extranet client of this VPN.

Value— DN

Default— No value

Editing Level—Basic

display-name *display-name*—(Optional) Subscriber's name as it appears in portal applications. If you do not specify a display name, the value of the name option is used.

Value— Text

Default— No value

Editing Level—Basic

`description` *description*—(Optional) Description of the object that you are configuring.

Value— Text

Default— No value

Editing Level—Basic

Required Privilege Level

subscriber

Required Editing Level

Basic

Redirect Server

The following table summarizes the SRC command-line interface (SRC CLI) for the Redirect Server. Configuration statements and operational commands are listed in alphabetical order.

Redirect Server
Configuration Statements
redirect-server
redirect-server dns
redirect-server ip-redirect
redirect-server ldap
redirect-server monitor
Operational Commands
show redirect-server statistics

redirect-server

Syntax

```

redirect-server {
    tcp-port tcp-port;
    destination-url destination-url;
    proxy-support;
    proxy-destination-url proxy-destination-url;
    refresh;
    refresh-document refresh-document;
    request-rate request-rate;
    request-burst-size request-burst-size;
    client-rate client-rate;
    client-burst-size client-burst-size;
    check-file-extensions;
    file-extensions [file-extensions...];
    redundancy;
}

```

Hierarchy Level

```
[edit redirect-server]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure redirect server properties. The redirect server redirects HTTP requests to a captive portal page.

Options

`tcp-port tcp-port`—(Optional) TCP port number on which the redirect server listens for requests. Use any valid TCP port number.

Value—Integer in the range 1–65535

Default—8800

Editing Level—Basic

`destination-url destination-url`—URL sent as a response to redirect requests. Typically, this URL is the URL of the captive portal.

The URL can contain the special strings "%(url)s" and "%(proxy)s." If the HTTP request is sent to a proxy, the "%(url)s" string is replaced with the originally requested URL, and the "%(proxy)s" string is replaced with the proxy's "< ipAddress> :< port> ". If the request is sent directly, the string is replaced with "None."

If the `proxy-destination-url` option is not configured, this URL is used for both proxy and nonproxy requests.

Value— `http://< serverHost> /accessDenied.do?url= %(url)s` where `< serverHost>` is a valid URL; a string of ASCII characters.

Editing Level—Basic

`proxy-support`—(Optional) Enable proxy support. If you do not enable proxy support, the redirect server handles proxy requests in the same manner as direct requests.

Editing Level—Basic

`proxy-destination-url` *proxy-destination-url*—(Optional) URL sent as a response to proxy requests. If you do not configure a value, then the URL defaults to the value for the `destination-url` option. You can use this option to send proxy requests to a page different from the page specified by the `destination-url` option.

Value— Valid URL; string of ASCII characters in URL string format

Editing Level—Basic

`refresh`—(Optional) Specify that the redirect server send an HTTP 200 OK response with an HTML document that includes the `< HTTP-Equiv= "Refresh">` header to a subscriber's browser in response to a captured request. If not set, the redirect server sends a 302 Found response to the client. If the client is not a Web browser, typically it does not follow the URL included in the `refresh` option.

Editing Level—Basic

`refresh-document` *refresh-document*—(Optional)

Directory path to a local HTML file that the redirect server returns to a subscriber's browser in response to a captured HTTP request.

If you enter an invalid path, the redirect server uses a default file. This file can contain the string "%(url)s" which is replaced with the URL of the local HTML file to be returned to the subscriber's browser.

Value— Path to HTML file

Editing Level—Basic

`request-rate` *request-rate*—(Optional) Number of requests that the redirect server can accept per minute from all clients (global sustained rate).

Value— Integer in the range 0-2147483647

Default— 12000

Editing Level—Basic

`request-burst-size` *request-burst-size*—(Optional) Maximum number of requests that the redirect server can accept from all clients (burst size). This value should exceed value set by the `request-rate` option. If the number of requests exceeds this value, the redirect server drops the excess requests.

Value— Integer in the range 0-2147483647

Default— 18000

Editing Level—Basic

`client-rate` *client-rate*—(Optional) Number of requests that the redirect server can accept per minute for a single client (per client sustained rate).

Value— Integer in the range 0-2147483647

Default— 25

Editing Level—Basic

`client-burst-size` *client-burst-size*—(Optional) Maximum number of requests that the redirect server can accept for a single client (per client burst size). This value should exceed the value set by the `client-rate` option. If at any time the number of requests from one client exceeds this value, the redirect server drops the excess requests.

Value— Integer in the range 0-2147483647

Default— 50

Editing Level—Basic

`check-file-extensions`—(Optional) Check file extension of requested URLs and accept only URLs that point to files that have standard file extensions— < empty> , .asp, .htm, .html, .jsp, .php, .shtml, .shtm and .xml, and extensions specified by the `file-extensions` option. If a URL does not have a standard extension, the redirect server returns an HTTP 403 Forbidden message.

If not set, the redirect server accepts all file extensions.

Default—false

Editing Level—Basic

`file-extensions [file-extensions...]`—(Optional) List of file extensions that augments the standard list of extensions. Entries for extensions are case-sensitive and are preceded by a period.

Value— Text string of file extensions.

Editing Level—Basic

`redundancy`—(Optional) Enable redundancy for the redirect server on this system, which then monitors a redundant redirect server and configures static routes in the managed JUNOSe routers to facilitate failover.

Editing Level—Basic

Required Privilege Level

system

Required Editing Level

Basic

redirect-server dns

Syntax

```
redirect-server dns {
    enable;
    tcp-port tcp-port;
    udp-port udp-port;
    forwarder [forwarder...];
    error-ip-address error-ip-address;
}
```

Hierarchy Level

```
[edit redirect-server dns]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure properties for the DNS server included with the redirect server.

Options

enable—(Optional) Enable the DNS server included with the redirect server.

A DNS server is required to support HTTP proxies to resolve the name of any HTTP proxy, even if the name is valid only in the private domain of the client. You can use an external DNS server or the DNS server that is included with the redirect for this purpose.

Editing Level—Basic

tcp-port *tcp-port*—TCP port on which the DNS server listens. You can disable the TCP port by entering 0.

Value—Integer in the range 0–65535

Default—8853

Editing Level—Basic

udp-port *udp-port*—UDP port on which the DNS server listens. You can disable the

UDP port by entering 0.

Value—Integer in the range 0–65535

Default—8853

Editing Level—Basic

`forwarder [forwarder . . .]`—(Optional) DNS servers to which requests are forwarded.

If you specify DNS servers for this option, incoming requests are forwarded to one of these servers. If you do not specify servers, the DNS server will resolve incoming requests using the normal DNS method.

Value— List of fully qualified IP address of DNS servers.

Editing Level—Basic

`error-ip-address error-ip-address`—(Optional) IP address that is returned when a DNS request results in an unknown name (NXDOMAIN) error.

Value— Fully qualified IP address

Default—192.168.254.2

Editing Level—Basic

Required Privilege Level

system

Required Editing Level

Basic

redirect-server ip-redirect

Syntax

```
redirect-server ip-redirect {
    interface [interface...];
    port [port...];
}
```

Hierarchy Level

```
[edit redirect-server ip-redirect]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure IP redirection.

Options

`interface [interface...]`—(Optional) Interface on a C-series platform that forwards traffic to be redirected. If you do not specify one or more interface names, the redirect server accepts specified traffic from all interfaces.

Value— Interface name

Editing Level—Basic

`port [port...]`—(Optional) Port number that identifies traffic destined for this port to be redirected to another URL.

Value—Integer in the range 1-65535

Default— 80

Editing Level—Basic

Required Privilege Level

system

Required Editing Level

Basic

redirect-server ldap

Syntax

```
redirect-server ldap {
    url [url...];
    bind-dn bind-dn;
    bind-password bind-password;
    base-dn base-dn;
}
```

Hierarchy Level

```
[edit redirect-server ldap]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure directories employed by the redirect server.

Options

`url [url...]`— List of the URLs for directories employed by the redirect server.

Value— URL in the format `ldap://< host> :< portNumber>` , where `< host>` is the IP address or name of the host that supports the directory, and `< portNumber>` is the number of the TCP port. Example
— `ldap://localhost ldap://1.2.3.4:389`

Editing Level—Basic

`bind-dn bind-dn`— DN that the redirect server uses to authorize connections to the directory. The DN must have read and write access to `o= Network, < baseDN>` , where `< baseDN>` is the root of the SDX directory tree.

Value— DN

Editing Level—Basic

`bind-password bind-password`— Password used to authorize connections to the directory.

Value— Text string in LDAP format
Editing Level—Basic

base-dn base-dn—(Optional) Base DN that is the root of the SDX directory tree. The redirect server can store information at any DN subordinate to the base DN that you specify.

Value— DN
Default—o= umc
Editing Level—Basic

Required Privilege Level

system

Required Editing Level

Basic

redirect-server monitor

Syntax

```

redirect-server monitor {
    redundant-host-ip-address redundant-host-ip-address;
    virtual-ip-address virtual-ip-address;
    real-ip-address real-ip-address;
    primary-server;
    check-interval check-interval;
    virtual-routers [virtual-routers...];
}

```

Hierarchy Level

```
[edit redirect-server monitor]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure redundancy for the redirect server. With redundancy configured, a pair of redirect servers monitor each other. If one server detects that the other server is not responding, it reconfigures all managed JUNOS virtual routers with a static route that points to a virtual IP address to the active redirect server.

Options

`redundant-host-ip-address` *redundant-host-ip-address*— IP address of the redundant redirect server.

Value— Fully qualified IP address

Editing Level—Basic

`virtual-ip-address` *virtual-ip-address*— Virtual IP address of the redirect server. Do not specify a hostname.

You can configure the primary and redundant redirect servers to share this address under a common name in the DNS. Each redirect server dynamically sets up and maintains a static route on managed JUNOS routers. The static route directs client traffic destined for the virtual IP address to the real IP address of the active redirect server.

Value— Fully qualified IP address

Default—192.168.254.1

Editing Level—Basic

`real-ip-address` *real-ip-address*— Real IP address of the redirect server. Do not specify a hostname.

Each redirect server dynamically sets up and maintains a static route on managed JUNOS routers. The static route directs client traffic that is destined for the virtual IP address to the real IP address of the active redirect server.

Value— Fully qualified IP address

Editing Level—Basic

`primary-server`—(Optional) Set this redirect server as the primary server. When the primary redirect server is started, it configures a static route for the virtual IP address.

If not enabled for this redirect server, this server becomes the redundant one.

Default—false

Editing Level—Basic

`check-interval` *check-interval*—(Optional) Interval at which the primary redirect server polls the redundant redirect server.

A shorter interval leads to faster detection of problems and results in higher consumption of CPU resources.

Value— Number of seconds in the range 60/clientRate–2147483647, where clientRate is the number of requests per minute that the redirect server accepts from one client.

Default—30

Editing Level—Basic

`virtual-routers` [*virtual-routers...*]— List of virtual routers to which the redirect server connects.

Value— Identifier for the virtual router in the format < vrName> @< routerName> , where < vrName> is the name of the virtual router, and < routerName> is the name of the router on which the virtual router is configured.

Editing Level—Basic

Required Privilege Level

system

Required Editing Level

Basic

show redirect-server statistics

Syntax

```
show redirect-server statistics < (brief) >
```

Release Information

Command introduced in SRC Release 1.0.0

Description

Display statistics for redirect server.

Options

(Optional) Output style.

Value

- `brief`— Display brief information.

Default—normal

Required Privilege Level

view

SRC Admission Control Plug-In (SRC-ACP)

The following table summarizes the SRC command-line interface (SRC CLI) for providing admission control. Configuration statements and operational commands are listed in alphabetical order.

SRC-ACP
Configuration Statements
shared_acp_configuration_acp-options
shared_acp_configuration_corba
shared_acp_configuration_ldap_service-data
shared_acp_configuration_ldap_subscriber-data
shared_acp_configuration_logger
shared_acp_configuration_logger_name_file
shared_acp_configuration_logger_name_syslog
shared_acp_configuration_redundancy
shared_acp_configuration_scripts-and-classification
shared_acp_congestion-point-classifier_rule
shared_acp_congestion-point-classifier_rule_name_condition
shared_acp_group
shared_admission-control_device
shared_admission-control_device_name_interface
shared_congestion-points_congestion-point-profile
shared_congestion-points_profile
slot_number_acp
slot_number_acp_initial
slot_number_acp_initial_directory-connection
slot_number_acp_initial_directory-eventing

Operational Commands
<u>request_acp_reorganize-backup-database</u>
<u>show_acp_backbone_congestion-point_congestion-point-expression</u>
<u>show_acp_backbone_congestion-point_dn</u>
<u>show_acp_backbone_service</u>
<u>show_acp_edge_congestion-point_dn</u>
<u>show_acp_edge_congestion-point_subscriber-session-id</u>
<u>show_acp_edge_subscriber</u>
<u>show_acp_remote-update_congestion-point_dn</u>
<u>show_acp_remote-update_congestion-point_name</u>
<u>show_acp_remote-update_subscriber</u>
<u>show_acp_statistics_device</u>
<u>show_acp_statistics_directory</u>
<u>show_acp_statistics_general</u>

shared acp configuration acp-options

Syntax

```
shared acp configuration acp-options {
    backup-directory backup-directory;
    mode (edge | backbone | dual);
    event-cache-size event-cache-size;
    overload-method overload-method;
    reservation-timeout reservation-timeout;
    congestion-point-auto-completion;
    tuning-factor tuning-factor;
    subscriber-bandwidth-exceed-message subscriber-bandwidth-exceed-message;
    network-bandwidth-exceed-message network-bandwidth-exceed-message;
    backup-database-maximum-size backup-database-maximum-size;
    remote-update-database-index-keys remote-update-database-index-keys;
    interface-tracking-filter interface-tracking-filter;
    state-sync-bulk-size state-sync-bulk-size;
}
```

Hierarchy Level

```
[edit shared acp configuration acp-options]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure SRC-ACP operation.

Options

`backup-directory` *backup-directory*— Folder that stores backup information about subscribers, services, and congestion points.

Value—Text

Default— backup

Editing Level—Expert

`mode` (edge | backbone | dual)— Regions of the network that SRC-ACP manages.

Value— One of the following regions:

- **edge**—SRC-ACP operates in the edge region of network only
- **backbone**—SRC-ACP operates in the backbone region of the network only
- **dual**—SRC-ACP operates in both the edge and backbone regions of network

Default— dual

Editing Level—Basic

`event-cache-size` *event-cache-size*— Number of plug-in events from the SAE that SRC-ACP can store in its cache. Specifying a large number increases the efficiency of SRC-ACP, and minimizes the use of CPU resources; however, the amount of memory available for the cache will depend on the host's resources.

Value—Integer in the range 0-2147483647

Default— 10000

Editing Level—Expert

`overload-method` *overload-method*— Specifies how SRC-ACP deals with situations where the components exceed the allocated bandwidth because the service was activated after the authorization was granted.

Value— Integer in the range -1-2147483647

- **-1**—SRC-ACP ignores overload
- Integer greater than or equal to 0—Bandwidth (in bps) by which the maximum may be exceeded

Default— 0

Editing Level—Basic

`reservation-timeout` *reservation-timeout*—(Optional) Time to wait until a bandwidth reservation expires. The reserved bandwidth is reclaimed by SRC-ACP when the reservation expires.

Value—Integer in the range 0-2147483647 ms

Default— 10000

Editing Level—Basic

`congestion-point-auto-completion`—(Optional) Specifies whether SRC-ACP uses the information acquired from the router to determine the congestion points.

Editing Level—Basic

`tuning-factor` *tuning-factor*— Specifies factors that compensate for actual use of bandwidth, as opposed to allocated bandwidth.

Value— List of tuning factors, separated by commas; each tuning factor is a floating number in the range 0-1

Default— None

Editing Level—Basic

`subscriber-bandwidth-exceed-message` *subscriber-bandwidth-exceed-message*— Error message that SRC-ACP sends when the subscriber exceeds the allocated bandwidth.

Value—Text

Default— Subscriber bandwidth exceeded

Editing Level—Basic

`network-bandwidth-exceed-message` *network-bandwidth-exceed-message*— Error message that SRC-ACP sends when traffic flow exceeds the allocated bandwidth on an interface between the subscriber and the router.

Value—Text

Default— Network bandwidth exceeded

Editing Level—Basic

`backup-database-maximum-size` *backup-database-maximum-size*— Value by which the sum of the sizes of the files that contain SRC-ACP data can increment before SRC-ACP reorganizes the files. Reorganizing the files reduces their size. Choose a value that is significantly lower than the capacity of the machine's hard disk.

Value— Text string in the format *numberm* or *numberg*

- *numberm*—Size of database in megabytes
- *numberg*—Size of database in gigabytes

Default— 100m

Editing Level—Basic

`remote-update-database-index-keys` *remote-update-database-index-keys*— Values to look for in the configuration data. Specifying index keys can improve performance by filtering the data. For information about the values you can specify, see the documentation that describes how to configure SRC-ACP operation.

Value— List of attributes, separated by commas
Default— interfaceName, routerName
Editing Level—Basic

`interface-tracking-filter` *interface-tracking-filter*— Interface tracking event to be ignored by SRC-ACP. Filtering the interface tracking events can improve performance and can reduce the amount of memory required for keeping the congestion points updated. For information about the values you can specify, see the documentation that describes how to configure SRC-ACP operation.

Value— Filter strings in the format of a list of < attribute> = < value> pairs; that can be contained within query operations
Editing Level—Basic

`state-sync-bulk-size` *state-sync-bulk-size*—(Optional) Number of events the SAE sends to SRC-ACP in a single method call during state synchronization.

Value—Integer in the range 1-1000
Default— 100
Editing Level—Basic

Required Privilege Level

system

Required Editing Level

Basic

shared acp configuration corba

Syntax

```
shared acp configuration corba {
    acp-ior acp-ior;
    remote-update-ior remote-update-ior;
}
```

Hierarchy Level

```
[edit shared acp configuration corba]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure CORBA interfaces.

Options

acp-ior acp-ior— Object reference for SRC-ACP that is exported through either a local file or a Common Object Services (COS) naming service.

Value— One of the following references:

- *file://path*—Exports object reference through a local file where *path* is the absolute path to local file
- *corbaname::cosNameServer#KEY*—Exports object reference through COS naming services
 - *cosNameServer*—IP address or Domain Name System (DNS) name of COS naming server
 - *KEY*—Object reference of SRC-ACP
- *corbaname:rir#KEY*—Exports object reference through COS naming service; resolve-initial-references (rir) function finds DNS name of COS naming server

Default— *file:///var/acp/sra.ior*

Editing Level—Basic

remote-update-ior remote-update-ior—(Optional) Object reference for the SRC-

ACP external interface.

Value— One of the following references:

- `file://path`—Exports object reference through a local file where *path* is the absolute path to local file
- `corbaname::cosNameServer#KEY`—Exports object reference through COS naming services
 - *cosNameServer*—IP address or Domain Name System (DNS) name of COS naming server
 - *KEY*—Object reference of SRC-ACP
- `corbaname:rir#KEY`—Exports object reference through COS naming service; resolve-initial-references (rir) function finds DNS name of COS naming server

Default— `file:///var/acp/sra.ior`

Editing Level—Basic

Required Privilege Level

system

Required Editing Level

Basic

shared acp configuration ldap service-data

Syntax

```
shared acp configuration ldap service-data {
    edge-congestion-point-dn edge-congestion-point-dn;
    backbone-congestion-point-dn backbone-congestion-point-dn;
    reload-congestion-points;
    congestion-points-eventing;
    server-address server-address;
    server-port server-port;
    dn dn;
    principal principal;
    password password;
    event-dn event-dn;
    directory-eventing;
    polling-interval polling-interval;
}
```

Hierarchy Level

```
[edit shared acp configuration ldap service-data]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure SRC-ACP connection to the directory that stores information about services.

Options

edge-congestion-point-dn edge-congestion-point-dn— DN of the directory that contains information about network interfaces for edge congestion points.

Value— DN

Default— o= AdmissionControl, o= umc

Editing Level—Expert

backbone-congestion-point-dn backbone-congestion-point-dn— DN of the directory that contains information about network interfaces for backbone congestion point objects.

Value— DN
Default— o= CongestionPoints, o= umc
Editing Level—Expert

`reload-congestion-points`—(Optional) Specifies whether SRC-ACP detects changes in the backbone congestion point for a service while SRC-ACP is operative.

Enable only when you want to modify a congestion point. Disable when you have modified the congestion point.

Editing Level—Basic

`congestion-points-eventing`—(Optional) Enables directory eventing for congestion points.

Editing Level—Basic

`server-address` *server-address*— List of primary and redundant servers that manage data.

Value— List of IP addresses or hostnames separated by spaces
Default— 127.0.0.1
Editing Level—Normal

`server-port` *server-port*— TCP port for the directory.

Value—Integer in the range 0-65535
Default— 389
Editing Level—Normal

`dn` *dn*— DN of the root of the directory.

Value— List of attribute = value pairs separated by commas
Editing Level—Advanced

`principal` *principal*— DN used to authorize connections to the directory.

Value— List of attribute = value pairs separated by commas
Default— cn= umcadmin, o= umc
Editing Level—Advanced

`password` *password*— Password used to authorize connections to the directory.

Value— Secret text

Default— admin123

Editing Level— Advanced

`event-dn` *event-dn*— DN of the directory that contains event information.

Value— DN

Editing Level— Expert

`directory-eventing`— (Optional) Enable directory eventing.

Editing Level— Advanced

`polling-interval` *polling-interval*— Time interval at which the SRC component polls the directory.

Value— Number of seconds in the range 15-86400

Default— 30

Editing Level— Advanced

Required Privilege Level

system

Required Editing Level

Normal

shared acp configuration ldap subscriber-data

Syntax

```
shared acp configuration ldap subscriber-data {
  congestion-points-eventing;
  server-address server-address;
  server-port server-port;
  dn dn;
  principal principal;
  password password;
  event-dn event-dn;
  directory-eventing;
  polling-interval polling-interval;
}
```

Hierarchy Level

```
[edit shared acp configuration ldap subscriber-data]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure SRC-ACP connection to the directory that stores subscriber information.

Options

`congestion-points-eventing`—(Optional) Enables directory eventing for congestion points.

Editing Level—Basic

`server-address server-address`— List of primary and redundant servers that manage data.

Value— List of IP addresses or hostnames separated by spaces

Default— 127.0.0.1

Editing Level—Normal

`server-port server-port`— TCP port for the directory.

Value—Integer in the range 0–65535
Default— 389
Editing Level—Normal

dn *dn*— DN of the root of the directory.

Value— List of attribute = value pairs separated by commas
Editing Level—Advanced

principal *principal*— DN used to authorize connections to the directory.

Value— List of attribute = value pairs separated by commas
Default— cn= umcadmin, o= umc
Editing Level—Advanced

password *password*— Password used to authorize connections to the directory.

Value—Secret text
Default— admin123
Editing Level—Advanced

event-dn *event-dn*— DN of the directory that contains event information.

Value— DN
Editing Level—Expert

directory-eventing—(Optional) Enable directory eventing.

Editing Level—Advanced

polling-interval *polling-interval*— Time interval at which the SRC component polls the directory.

Value— Number of seconds in the range 15–86400
Default— 30
Editing Level—Advanced

Required Privilege Level

system

Required Editing Level

Normal

shared acp configuration logger

Syntax

```
shared acp configuration logger name ...
```

Hierarchy Level

```
[edit shared acp configuration logger]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure the logging destination.

Options

`name name`— Name of logging destination.

Value—Text

Required Privilege Level

system

Required Editing Level

Basic

shared acp configuration logger *name* file

Syntax

```
shared acp configuration logger name file {
    filter filter;
    filename filename;
    rollover-filename rollover-filename;
    maximum-file-size maximum-file-size;
}
```

Hierarchy Level

```
[edit shared acp configuration logger name file]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure logging of messages to a file.

Options

filter filter—(Optional) Filter to define which event messages the software logs or ignores. Filters can specify the logging level, such as debug, or can specify expressions. For information about expressions, see the documentation that describes how to configure logging.

Value— Log filter

Default— The default value is different for each type of component.

Editing Level—Basic

filename filename— Absolute path of the filename that contains the current logs.

Note: Make sure that the user under which the J2EE application server or Web application server runs has write access to this folder. If this user does not have write access to the default folder, configure the component or application to write logs in folders to which the user has write access.

Value— Filename

Default— By default, SRC components and applications write log files in the folder in which the component or application is started.

Editing Level—Basic

`rollover-filename rollover-filename`—(Optional) Absolute path of the filename that contains the log history. When the log file reaches the maximum size, the software closes the log file and renames it with the name you specify for the rollover file. If a previous rollover file exists, the software overwrites it. The software then reopens the log file and continues to save event messages in it.

Value— Path of filename

Example—`/opt/UMC/sae/var/log/sae.alt`

Default— The default value is different for each type of component.

Editing Level—Normal

`maximum-file-size maximum-file-size`—(Optional) Maximum size of the log file and the rollover file.

Do not set the maximum file size to a value greater than the available disk space.

Value—Integer in the range 0–2147483647 kbytes

Default— 1000000

Editing Level—Normal

Required Privilege Level

system

Required Editing Level

Basic

shared acp configuration logger *name* syslog

Syntax

```
shared acp configuration logger name syslog {
    filter filter;
    host host;
    facility facility;
    format format;
}
```

Hierarchy Level

```
[edit shared acp configuration logger name syslog]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure logging of messages to system logging.

Options

filter filter—(Optional) Filter to define which event messages the software logs or ignores. Filters can specify the logging level, such as debug, or can specify expressions. For information about expressions, see the documentation that describes how to configure logging.

Value— Log filter
Default—/error-
Editing Level—Basic

host host— IP address or name of a host that collects event messages by means of a standard system logging daemon.

Value— IP address or hostname
Default—loghost
Editing Level—Basic

facility facility—(Optional) Type of system log in accordance with the system logging protocol.

Value—Integer in the range 0–23

Default— 3

Editing Level—Advanced

format *format*—(Optional) MessageFormat string that specifies how the information in an event message is printed. (The strings {#} are replaced with the log information [...]).

Value— MessageFormat string as specified in <http://java.sun.com/j2se/1.4.2/docs/api/java/text/MessageFormat.html>.

The fields available for events are:

- 0—Time and date of the event
- 1—Name of the thread generating the event
- 2—Text message of the event
- 3—Category of the event
- 4—Priority of the event

Default— None

Editing Level—Advanced

Required Privilege Level

system

Required Editing Level

Basic

shared acp configuration redundancy

Syntax

```
shared acp configuration redundancy {
  enable-redundancy;
  local-ior local-ior;
  remote-ior remote-ior;
  ignore-user-tracking-out-of-sync;
  community-heartbeat community-heartbeat;
  community-acquire-timeout community-acquire-timeout;
  community-blackout-timeout community-blackout-timeout;
  redundant-naming-service redundant-naming-service;
}
```

Hierarchy Level

```
[edit shared acp configuration redundancy]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure redundancy and state synchronization for SRC-ACP.

Options

`enable-redundancy`—(Optional) Enables SRC-ACP redundancy.

Editing Level—Basic

`local-ior local-ior`— In a redundant SRC-ACP configuration, exports the object reference for this SRC-ACP (local interface) through a Common Object Services (COS) naming service.

Value— One of the following references:

- `corbaname::cosNameServer#KEY`—Exports object reference through COS naming services
 - `cosNameServer`—IP address or Domain Name System (DNS) name of COS naming server
 - `KEY`—Object reference of SRC-ACP

- `corbaname:rir#KEY`—Exports object reference through COS naming service; resolve-initial-references (rir) function finds DNS name of COS naming server

For example: `corbaname::coshost#acp.redundancy.primary`

Editing Level—Basic

`remote-ior remote-ior`— In a redundant SRC-ACP configuration, resolves the object reference for the other SRC-ACP (remote interface) through a Common Object Services (COS) naming service. For redundancy, the remote IOR value of one SRC-ACP must match the local IOR value of the other SRC-ACP.

Value— One of the following references:

- `corbaname::cosNameServer#KEY`—Exports object reference through COS naming services
 - `cosNameServer`—IP address or Domain Name System (DNS) name of COS naming server
 - `KEY`—Object reference of SRC-ACP
- `corbaname:rir#KEY`—Exports object reference through COS naming service; resolve-initial-references (rir) function finds DNS name of COS naming server

For example: `corbaname::coshost#acp.redundancy.backup`

Editing Level—Basic

`ignore-user-tracking-out-of-sync`—(Optional) Specifies whether user tracking events should be ignored when they raise an `OutOfSync` exception to the SAE when state synchronization is enabled. SRC-ACP raises an `OutOfSync` exception when SRC-ACP handles service tracking or authentication events without receiving a user start event first.

Default— false

Editing Level—Basic

`community-heartbeat community-heartbeat`—(Optional) Time interval for community members to check each other's availability when both redundancy and state synchronization are enabled.

Value—Integer in the range 0–2147483647 s

Default— 30

Editing Level—Basic

`community-acquire-timeout community-acquire-timeout`—(Optional) Time to wait before trying to reacquire the distributed lock when both redundancy and state synchronization are enabled.

Value—Integer in the range 0-2147483647 s

Default— 15

Editing Level—Basic

`community-blackout-timeout` *community-blackout-timeout*—(Optional)
Time to wait before regaining control when both redundancy and state synchronization are enabled.

Value—Integer in the range 0-2147483647 s

Default— 30

Editing Level—Basic

`redundant-naming-service` *redundant-naming-service*—(Optional) In a redundant SRC-ACP configuration, exports the object reference for the backup naming service through a local file or COS naming service. The primary SRC-ACP registers the IOR and redundancy IOR to both naming services, while the secondary SRC-ACP registers the redundancy IOR to both naming services.

Value— One of the following references:

- `file://path`—Exports object reference through a local file where *path* is the absolute path to local file
- `corbaname::cosNameServer#KEY`—Exports object reference through COS naming services
 - *cosNameServer*—IP address or Domain Name System (DNS) name of COS naming server
 - *KEY*—Object reference of SRC-ACP
- `corbaname:rir#KEY`—Exports object reference through COS naming service; `resolve-initial-references` (`rir`) function finds DNS name of COS naming server

Default— None

Editing Level—Basic

Required Privilege Level

system

Required Editing Level

Basic

shared acp configuration scripts-and-classification

Syntax

```
shared acp configuration scripts-and-classification {
  script-factory-class script-factory-class;
  classification-factory-class classification-factory-class;
  classification-script classification-script;
  congestion-point-profile-script congestion-point-profile-script;
  extension-path extension-path;
}
```

Hierarchy Level

```
[edit shared acp configuration scripts-and-classification]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure SRC-ACP scripts and classification.

Options

`script-factory-class script-factory-class`— Script factory class name.

Value—Text

Default— net.juniper.smgmt.acp.classify.ScriptFactory

Editing Level—Expert

`classification-factory-class classification-factory-class`—
Congestion point classifier factory class name.

Value—Text

Default— net.juniper.smgmt.acp.classify.ClassifyCPFactory

Editing Level—Expert

`classification-script classification-script`— Class name for congestion
point classification.

Value—Text
Default— cpClassify
Editing Level—Expert

`congestion-point-profile-script` *congestion-point-profile-script*—
Class name for generating the congestion point DN by using the congestion point profile.

Value—Text
Default— cpProfile
Editing Level—Expert

`extension-path` *extension-path*— Extension class path for classes not located in
the /opt/UMC/acp/lib directory.

Value—Text
Editing Level—Basic

Required Privilege Level

system

Required Editing Level

Advanced

shared acp congestion-point-classifier rule

Syntax

```
shared acp congestion-point-classifier rule name {
    target target;
    script script;
}
```

Hierarchy Level

```
[edit shared acp congestion-point-classifier rule]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure congestion point classification script.

Options

`name name`— Name of a congestion point classification script.

Value—Text

`target target`—(Optional) Result of the classification script. The result is the DN of a congestion point in the directory or an LDAP query that uniquely identifies a congestion point entry in the directory.

Value—Text

Editing Level—Basic

`script script`—(Optional) Classification criteria for the target in the classification script.

Value— Classification criteria are organized by putting one criterion per line. A criterion is joined with the previous criterion by:

- OR if the line does not contain a prefix or if it is prefixed with a | (pipe) character. A criterion joined by OR is examined only if

- the previous conditions have not produced a positive match. If any of the criteria joined by OR matches, the target is selected.
- AND if the line is prefixed with an & (ampersand) character. A criterion joined by AND is examined only if the previous condition matches.

You can use glob or regular expression matching to configure each target's criteria.

Default— No value

Editing Level—Basic

Required Privilege Level

No specific privilege required.

Required Editing Level

Basic

shared acp congestion-point-classifier rule *name* condition

Syntax

```
shared acp congestion-point-classifier rule name condition name ...
```

Hierarchy Level

```
[edit shared acp congestion-point-classifier rule name condition]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure classification criteria that is used to find a target.

Options

`name name`— Classification criteria.

Value—Text

Required Privilege Level

No specific privilege required.

Required Editing Level

Basic

shared acp group

Syntax

```
shared acp group name ...
```

Hierarchy Level

```
[edit shared acp group]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure group of SRC-ACP configuration properties.

Options

name name— Name of an SRC-ACP configuration.

Value—Text

Required Privilege Level

system

Required Editing Level

Basic

shared admission-control device

Syntax

```
shared admission-control device name {
    description description;
}
```

Hierarchy Level

```
[edit shared admission-control device]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure the locations of congestion points in the directory.

Options

`name name`— Network device name.

Value—Text

`description description`—(Optional) Network device description.

Value—Text

Editing Level—Basic

Required Privilege Level

system

Required Editing Level

Basic

shared admission-control device *name* interface

Syntax

```
shared admission-control device name interface name {
    description description;
    upstream-provisioned-rate upstream-provisioned-rate;
    downstream-provisioned-rate downstream-provisioned-rate;
    upstream-background-bandwidth [upstream-background-bandwidth...];
    downstream-background-bandwidth [downstream-background-bandwidth...];
    action-type (url | python | java-class | java-archive);
    action-class-name action-class-name;
    action-file-url action-file-url;
    action-parameters [action-parameters...];
}
```

Hierarchy Level

```
[edit shared admission-control device name interface]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure the network interfaces that represent locations of congestion points in the directory.

Options

`name name`—Interface name.

Value—Text

`description description`—(Optional) Network interface description.

Value—Text

Editing Level—Basic

`upstream-provisioned-rate upstream-provisioned-rate`—(Optional)
Upstream provisioned rate.

Value—Integer in the range 0–9223372036854775807 bps
Editing Level—Basic

`downstream-provisioned-rate` *downstream-provisioned-rate*—(Optional)
 Downstream provisioned rate.

Value—Integer in the range 0–9223372036854775807 bps
Editing Level—Basic

`upstream-background-bandwidth` [*upstream-background-bandwidth...*]—
 (Optional) Upstream background bandwidth.

Value—Integer in the range 0–9223372036854775807 bps
Editing Level—Basic

`downstream-background-bandwidth` [*downstream-background-bandwidth...*]—(Optional) Downstream background bandwidth.

Value—Integer in the range 0–9223372036854775807 bps
Editing Level—Basic

`action-type` (`url` | `python` | `java-class` | `java-archive`)—(Optional) File type of the application run by the action congestion point.

Value

- `url`— URL of the script file
- `python`— Jython source code
- `java-class`— Compiled Java class file
- `java-archive`— Java archive file (.jar)

Editing Level—Basic

`action-class-name` *action-class-name*—(Optional) Name of the class that implements the SPI.

Value—Text
Editing Level—Basic

`action-file-url` *action-file-url*—(Optional) URL or content of the script file used by the action congestion point.

Value—Text
Editing Level—Basic

`action-parameters` [*action-parameters...*]—(Optional) Parameters used by the action congestion point.

Value— Text string in the format of a list of < attribute> = < value> pairs
Editing Level—Basic

Required Privilege Level

system

Required Editing Level

Basic

shared congestion-points congestion-point-profile

Syntax

```
shared congestion-points congestion-point-profile name {
    expression [expression...];
}
```

Hierarchy Level

```
[edit shared congestion-points congestion-point-profile]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure congestion point profile.

Options

name name— Congestion point profile name.

Value—Text

expression [expression...]—(Optional) Congestion point expression.

Value—Text

Editing Level—Basic

Required Privilege Level

system

Required Editing Level

Basic

shared congestion-points profile

Syntax

```
shared congestion-points profile name {
    interface [interface...];
}
```

Hierarchy Level

```
[edit shared congestion-points profile]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure congestion point.

Options

name *name*— Congestion point name.

Value—Text

interface [*interface...*]—(Optional) Congestion point reference.

Value—Text

Editing Level—Basic

Required Privilege Level

system

Required Editing Level

Basic

slot *number* acp

Syntax

```
slot number acp {
    java-runtime-environment java-runtime-environment;
    java-heap-size java-heap-size;
    java-garbage-collection-options java-garbage-collection-options;
    base-dn base-dn;
    snmp-agent;
    shared shared;
}
```

Hierarchy Level

```
[edit slot number acp]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure local properties for SRC-ACP.

Options

`java-runtime-environment` *java-runtime-environment*— Path to the Java Runtime Environment (JRE). The SRC software requires a JRE that conforms to the Java 2 specification.

Value—Text

Default— `../jre/bin/java`

Editing Level—Expert

`java-heap-size` *java-heap-size*— Maximum amount of Java heap (memory) available to the JRE.

Value— Number of megabytes in the format *integerm*

Default— 64m

Editing Level—Advanced

`java-garbage-collection-options` *java-garbage-collection-options*—

Garbage collection functionality of the Java Virtual Machine.

Value—

Default— `-Xbatch -XX:+ UseConcMarkSweepGC -XX:CMSInitiatingOccupancyFraction= 80 -XX:NewRatio= 5 -XX:+ UseParNewGC -XX:SurvivorRatio= 1 -XX:InitialTenuringThreshold= 8 -XX:MaxTenuringThreshold= 10 -XX:TargetSurvivorRatio= 90 -XX:+ UseCMSCompactAtFullCollection -XX:CMSFullGCsBeforeCompaction= 0 -XX:+ CMSPermGenSweepingEnabled -XX:+ CMSClassUnloadingEnabled -XX:+ CMSParallelRemarkEnabled`

Editing Level—Advanced

`base-dn` *base-dn*— DN of the root of the SDX data in the directory.

If you are storing non-SDX data in the directory, and that data changes frequently whereas the SDX data does not, you may need to adjust the default value to improve performance. For optimal performance, set the value to the DN of an entry superior to both the SDX data and the changing non-SDX data.

Value— DN

Editing Level—Advanced

`snmp-agent`—(Optional) Enables SRC-ACP to communicate with the SNMP agent.

Editing Level—Basic

`shared` *shared*— Shared configuration object that holds most of the SRC-ACP specific configuration.

Value— Name of the object in the format `"/< path> "`. If the `< path>` contains multiple levels, the levels are separated by a slash (`/`). The effective configuration is combined by all configuration objects in the path, with more specific configuration in the lower levels of the path.

Default— `/config`

Editing Level—Basic

Required Privilege Level

system

Required Editing Level

Basic

slot *number* acp initial

Syntax

```
slot number acp initial {
    static-dn static-dn;
    dynamic-dn dynamic-dn;
}
```

Hierarchy Level

```
[edit slot number acp initial]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Configure initial properties for SRC components.

Options

`static-dn static-dn`—(Optional) Location of administrator-defined configuration data in the directory.

Value—Text

Default—ou= staticConfiguration,ou= Configuration,o= Management,
o= umc

Editing Level—Expert

`dynamic-dn dynamic-dn`—(Optional) Location of programmatically-defined configuration data in the directory.

Value—Text

Default—ou= dynamicConfiguration,ou= Configuration,
o= Management,o= umc

Editing Level—Expert

Required Privilege Level

system

Required Editing Level

Basic

slot *number* acp initial directory-connection

Syntax

```
slot number acp initial directory-connection {
    url url;
    backup-urls [backup-urls...];
    principal principal;
    credentials credentials;
    protocol (ldaps);
    timeout timeout;
    check-interval check-interval;
    blacklist;
    snmp-agent;
}
```

Hierarchy Level

```
[edit slot number acp initial directory-connection]
```

Description

Configure properties for the directory connection.

Options

`url url`—(Optional) URL that identifies the location of the primary directory server.

Value— URL

Default—`ldap://127.0.0.1:389`

Editing Level—Basic

`backup-urls [backup-urls...]`—(Optional) URLs that identify the locations of backup directory servers. Backup servers are used if the primary directory server is not accessible.

Value— List of URLs

Editing Level—Basic

`principal principal`— DN that the SRC component uses for authentication to access the directory.

Value— DN.

When you specify the DN, you can use `< base >` to indicate the base DN.

Editing Level—Basic

`credentials` *credentials*— Password with which the SRC component accesses the directory.

Value— Password

Editing Level—Basic

`protocol` (`ldaps`)—(Optional) Security protocol used to connect to the directory. If you do not configure a security protocol, plain socket is used.

Value

- `ldaps`— LDAPS which uses SSL.

Editing Level—Expert

`timeout` *timeout*—(Optional) Maximum amount of time during which the directory must respond to a connection request.

Value—Integer in the range 1-2147483647 s

Default—10

Editing Level—Expert

`check-interval` *check-interval*—(Optional) Time interval at which the directory monitoring system verifies its connection to the directory. If the directory connection fails after this interval, the directory monitoring system initiates a connection to another directory.

Value—Integer in the range 15-2147483647 s

Default—60

Editing Level—Expert

`blacklist`—(Optional) Specifies whether the directory monitoring system prevents connection to a directory if the directory fails to respond during 10 polling intervals.

Default—false

Editing Level—Basic

`snmp-agent`—(Optional) Specifies whether the SDX SNMP agent exports MIBs for this directory connection.

Default—false

Editing Level—Expert

Required Privilege Level

system

Required Editing Level

Basic

slot *number* acp initial directory-eventing

Syntax

```
slot number acp initial directory-eventing {
    eventing;
    signature-dn signature-dn;
    polling-interval polling-interval;
    event-base-dn event-base-dn;
    dispatcher-pool-size dispatcher-pool-size;
}
```

Hierarchy Level

```
[edit slot number acp initial directory-eventing]
```

Release Information

Statement introduced in SRC Release 1.0.0

Description

Change configuration for directory eventing properties. In most cases, you can use the default configuration for these properties.

Options

`eventing`—(Optional) Enable an SRC component to poll the directory for changes.

Default—true

Editing Level—Normal

`signature-dn signature-dn`—(Optional) DN of the directory entry that specifies the usedDirectory attribute for the SRC CLI. The usedDirectory attribute identifies the vendor of the directory server.

Value— DN

Default—o= umc

Editing Level—Expert

`polling-interval polling-interval`—(Optional) Interval at which an SRC component polls the directory to check for directory changes.

Value—Integer in the range 15–2147483647 s

Default—30

Editing Level—Normal

`event-base-dn` *event-base-dn*—(Optional)

DN of an entry superior to the data associated with an SRC component in the directory.

If you are storing non-SRC data in the directory, and that data changes frequently whereas the SRC data does not, you may need to adjust the default value to improve performance. For optimal performance, set the value to the DN of an entry superior to both the SRC data and the changing non-SRC data.

Value— DN

Default—o= UMC

Editing Level—Expert

`dispatcher-pool-size` *dispatcher-pool-size*—(Optional) Number of directory change notifications that can be sent simultaneously to the SRC component.

Value—Integer in the range 0–2147483647

Default—1

Editing Level—Expert

Required Privilege Level

system

Required Editing Level

Basic

request acp reorganize-backup-database

Syntax

```
request acp reorganize-backup-database <slot slot>
```

Release Information

Command introduced in SRC Release 1.0.0

Description

Reorganize the files that contain SRC-ACP data about subscribers, services, and congestion points. This action reduces the sizes of these files.

Options

`slot slot`—(Optional) Number of the slot for which you want to configure values.

Value— Currently, the chassis has only one slot. The valid value is 0.

Default—0

Required Privilege Level

maintenance

show acp backbone congestion-point congestion-point-expression

Syntax

```
show acp backbone congestion-point congestion-point-expression <slot slot>
<virtual-router-name virtual-router-name> <service-name service-name>
<interface-name interface-name> <interface-description interface-description>
<interface-alias interface-alias> <nas-port-id nas-port-id> < (brief) >
```

Release Information

Command introduced in SRC Release 1.0.0

Description

Display congestion point by service congestion point expression.

Options

`slot slot`—(Optional) Number of the slot for which you want to configure values.

Value— Currently, the chassis has only one slot. The valid value is 0.

Default—0

`virtual-router-name virtual-router-name`—(Optional) Name of virtual router from which to list congestion points.

Value— Virtual router name

Default— No value

`service-name service-name`—(Optional) Name of service used by backbone service to generate congestion points.

Value— Service name

Default— No value

`interface-name interface-name`—(Optional) Name of interface related to congestion points.

Value— Interface name

Default— No value

`interface-description` *interface-description*—(Optional) Description of interface used by backbone service to generate congestion points.

Value— Interface description

Default— No value

`interface-alias` *interface-alias*—(Optional) Interface alias used by backbone service to generate congestion points.

Value— Interface alias

Default— No value

`nas-port-id` *nas-port-id*—(Optional) Interface NAS port ID used by backbone service to generate congestion points.

Value— NAS port ID

Default— No value

(Optional) Output style.

Value

- `brief`— Display congestion point attributes.

Default— `detail`

Required Privilege Level

view

show acp backbone congestion-point dn

Syntax

```
show acp backbone congestion-point dn <slot slot> <congestion-point-dn
congestion-point-dn> <virtual-router-name virtual-router-name> < (brief) >
```

Release Information

Command introduced in SRC Release 1.0.0

Description

Display congestion point by DN.

Options

`slot slot`—(Optional) Number of the slot for which you want to configure values.

Value— Currently, the chassis has only one slot. The valid value is 0.

Default—0

`congestion-point-dn congestion-point-dn`—(Optional) DN of congestion point for which you want to list all matching congestion points.

Value— All or part of the congestion point DN.

Default— No value

`virtual-router-name virtual-router-name`—(Optional) Name of virtual router from which to list congestion points.

Value— Virtual router name

Default— No value

(Optional) Output style.

Value

- `brief`— Display congestion point DN.

Default—detail

Required Privilege Level

view

show acp backbone service

Syntax

```
show acp backbone service <slot slot> <virtual-router-name virtual-router-name> <service-name service-name> < (brief) >
```

Release Information

Command introduced in SRC Release 1.0.0

Description

Display information about services that SRC-ACP manages in the backbone network.

Options

`slot slot`—(Optional) Number of the slot for which you want to configure values.

Value— Currently, the chassis has only one slot. The valid value is 0.

Default—0

`virtual-router-name virtual-router-name`—(Optional) Name of virtual router from which to list backbone services.

Value— Virtual router name

Default— No value

`service-name service-name`—(Optional) Name of service used by backbone service to generate congestion points.

Value— Service name

Default— No value

(Optional) Output style.

Value

- `brief`— Display backbone service attributes.

Default—detail

Required Privilege Level

view

show acp edge congestion-point dn

Syntax

```
show acp edge congestion-point dn <slot slot> <congestion-point-dn congestion-
point-dn> <instance-id instance-id> <virtual-router-name virtual-router-name>
< (brief) > <maximum-results maximum-results>
```

Release Information

Command introduced in SRC Release 1.0.0

Description

Display congestion point by DN.

Options

slot slot—(Optional) Number of the slot for which you want to configure values.

Value— Currently, the chassis has only one slot. The valid value is 0.

Default—0

congestion-point-dn congestion-point-dn—(Optional) DN of congestion point for which you want to list all matching congestion points.

Value— All or part of the congestion point DN.

Default— No value

instance-id instance-id—(Optional) Name of an instance generated for a congestion point that is automatically created.

Value— All or part of the congestion point instance ID.

Default— No value

virtual-router-name virtual-router-name—(Optional) Name of virtual router from which to list congestion points.

Value— Virtual router name

Default— No value

(Optional) Output style.

Value

- `brief`— Display congestion point DN.

Default—`detail`

`maximum-results` *maximum-results*—(Optional) Number of results to be displayed.

Value—Integer in the range 1-2147483647

Default— 25

Required Privilege Level

view

show acp edge congestion-point subscriber-session-id

Syntax

```
show acp edge congestion-point subscriber-session-id <slot slot> <session-id
session-id> <virtual-router-name virtual-router-name> < (brief) > <maximum-
results maximum-results>
```

Release Information

Command introduced in SRC Release 1.0.0

Description

Display congestion point by subscriber session ID.

Options

slot slot—(Optional) Number of the slot for which you want to configure values.

Value— Currently, the chassis has only one slot. The valid value is 0.

Default—0

session-id session-id—(Optional) Subscriber session ID for which you want to list all matching congestion points.

Value— All or part of the subscriber session ID.

Default— No value

virtual-router-name virtual-router-name—(Optional) Name of virtual router from which to list congestion points.

Value— Virtual router name

Default— No value

(Optional) Output style.

Value

- *brief*— Display congestion point attributes.

Default—detail

`maximum-results` *maximum-results*—(Optional) Number of results to be displayed.

Value—Integer in the range 1-2147483647

Default— 25

Required Privilege Level

view

show acp edge subscriber

Syntax

```
show acp edge subscriber <slot slot> <virtual-router-name virtual-router-name>
<session-id session-id> < (brief) >
```

Release Information

Command introduced in SRC Release 1.0.0

Description

Display subscriber sessions in the edge network.

Options

`slot slot`—(Optional) Number of the slot for which you want to configure values.

Value— Currently, the chassis has only one slot. The valid value is 0.

Default—0

`virtual-router-name virtual-router-name`—(Optional) Name of virtual router from which to list subscriber sessions.

Value— Virtual router name

Default— No value

`session-id session-id`—(Optional) Subscriber session ID for which you want to list all matching subscriber sessions.

Value— All or part of the subscriber session ID.

Default— No value

(Optional) Output style.

Value

- `brief`— Display subscriber session attributes.

Default—detail

Required Privilege Level

view

show acp remote-update congestion-point dn

Syntax

```
show acp remote-update congestion-point dn <slot slot> <congestion-point-dn
congestion-point-dn> < (brief) >
```

Release Information

Command introduced in SRC Release 1.0.0

Description

Display congestion point by DN.

Options

`slot slot`—(Optional) Number of the slot for which you want to configure values.

Value— Currently, the chassis has only one slot. The valid value is 0.

Default—0

`congestion-point-dn congestion-point-dn`—(Optional) DN of congestion point for which you want to list all matching congestion points.

Value— All or part of the congestion point DN.

Default— No value

(Optional) Output style.

Value

- `brief`— Display congestion point DN.

Default—detail

Required Privilege Level

view

show acp remote-update congestion-point name

Syntax

```
show acp remote-update congestion-point name <slot slot> <device-name device-name> <interface-name interface-name> < (brief) >
```

Release Information

Command introduced in SRC Release 1.0.0

Description

Display congestion point by interface name.

Options

`slot slot`—(Optional) Number of the slot for which you want to configure values.

Value— Currently, the chassis has only one slot. The valid value is 0.

Default—0

`device-name device-name`—(Optional) Device name of the congestion point.

Value— Device name

Default— No value

`interface-name interface-name`—(Optional) Interface name of the congestion point.

Value— Interface name

Default— No value

(Optional) Output style.

Value

- `brief`— Display congestion point DN.

Default—detail

Required Privilege Level

view

show acp remote-update subscriber

Syntax

```
show acp remote-update subscriber <slot slot> <device-name device-name> <nas-
port-id nas-port-id> <nas-ip nas-ip> <subscriber-ip subscriber-ip> <phone
phone> < (brief) >
```

Release Information

Command introduced in SRC Release 1.0.0

Description

Display information about subscribers added through an external application.

Options

`slot slot`—(Optional) Number of the slot for which you want to configure values.

Value— Currently, the chassis has only one slot. The valid value is 0.

Default—0

`device-name device-name`—(Optional) Device name connected to subscriber.

Value— Device name

Default— No value

`nas-port-id nas-port-id`—(Optional) NAS port ID of interface connected to subscriber.

Value— NAS port ID

Default— No value

`nas-ip nas-ip`—(Optional) NAS IP address of device connected to subscriber.

Value— IP address

Default— No value

`subscriber-ip subscriber-ip`—(Optional) Subscriber IP address.

Value— IP address

Default— No value

`phone` *phone*—(Optional) Subscriber phone number.

Value— Phone number

Default— No value

(Optional) Output style.

Value

- `brief`— Display congestion point DN.

Default—`detail`

Required Privilege Level

`view`

show acp statistics device

Syntax

```
show acp statistics device <filter filter> < (brief) >
```

Release Information

Command introduced in SRC Release 1.0.0

Description

Display SNMP information for each device.

Options

filter filter—(Optional) Name of the device.

Value— All or part of the device name.

Default— No value

(Optional) Output style.

Value

- *brief*— Display only device names.

Default—*detail*

Required Privilege Level

view

show acp statistics directory

Syntax

```
show acp statistics directory
```

Release Information

Command introduced in SRC Release 1.0.0

Description

Display directory SNMP information.

Required Privilege Level

view

show acp statistics general

Syntax

```
show acp statistics general
```

Release Information

Command introduced in SRC Release 1.0.0

Description

Display SRC-ACP SNMP information.

Required Privilege Level

view