

SRC Component Overview

The SRC software is a dynamic system. It contains many components that you use to build a subscriber management environment. You can use these tools to customize and extend the SRC software for your use and to integrate the SRC software with other systems. The SRC software also provides the operating system and management tools for C-series Controllers.

Table 1 on page 1 gives a brief description of the components that make up the SRC software.

Table 1: Descriptions of SRC Components

Component	Description
Server Components	
Service activation engine (SAE)	<ul style="list-style-type: none">■ Authorizes, activates, and deactivates subscriber and service sessions by interacting with systems such as Juniper Networks routers, cable modem termination system (CMTS) devices, RADIUS servers, and directories.■ Collects accounting information about subscribers and services from routers, and stores the information in RADIUS accounting servers, flat files, and other accounting databases.■ Provides plug-ins and application programming interfaces (APIs) for starting and stopping subscriber and service sessions and for integrating with systems that authorize subscriber actions and track resource usage.
Juniper Policy Server (JPS)	Acts as a policy decision point (PDP) and policy enforcement point (PEP) that manages the relationships between application managers and CMTS devices in a PCMM environment.
Network information collector (NIC)	Collects information about the state of the network and can provide a mapping from a given type of network data to another type of network data.
Redirect Server	Redirects HTTP requests received from IP Filter to a captive portal page.
Repository	
Directory	Provides a repository of subscriber information, services, policies, and service portal configurations. The SRC software uses the Lightweight Directory Access Protocol (LDAP) for interactions with the directory.
Juniper Networks Database	Repository for SRC data on a C-series Controller.
SRC Configuration and Management Tools	
SRC command line interface (CLI)	Provides a way to configure the SRC software on a C-series Controller from a JUNOS-like CLI. The SRC CLI includes the policies, services, and subscribers CLI, which has separate access privileges.

Table 1: Descriptions of SRC Components *(continued)*

Component	Description
Server Components	
C-Web interface	Provides a way to configure, monitor, and manage the SRC software on a C-series Controller through a Web browser. The C-Web interface includes a policies, services, and subscribers component, which has separate access privileges.
Simple Network Management Protocol (SNMP) agent	Monitors system performance and availability. It runs on all the SRC hosts and makes management information available through SNMP tables and sends notifications by means of SNMP traps.
Service Management Applications (Run on external system)	
SRC SOAP Gateway (SRC-SG)	Allows a gateway client—an application that is not part of the SRC network—to interact with SRC components through a Simple Object Access Protocol (SOAP) interface. (Available in the application library.)
Deep Packet Inspection Integration application	Integrates Ellacoya Networks Deep Packet Inspection (DPI) platform to provide a traffic management solution that combines the advanced traffic identification and reporting features of the Ellacoya DPI with the SRC software's intelligent service policy enforcement. (Available in the application library.)
Threat Mitigation Portal (SRC-TMP)	Manages threats on the SRC-managed network using information provided by Juniper Networks IDP Sensors and Juniper Networks NetScreen-Security Manager. Provides the SRC Threat Mitigation Portal (SRC-TMP) and application to manage the response to attacks. (Available in the application library.)
SRC Programming Interfaces	
NETCONF API	Allows you to configure or request information from the NETCONF server on a C-series Controller that runs the SRC software. Applications developed with the NETCONF API run on a system other than a C-series Controller.
CORBA plug-in service provider interface (SPI)	Tracks sessions and enables linking the rest of the service provider's operations support system (OSS) with the SRC software so that the OSS can be notified of events in the life cycle of SAE sessions. Hosted plug-ins only.
CORBA remote API	Provides remote access to the SAE core API. Applications that use these extensions to the SRC software run on a system other than a C-series Controller.
NIC access API	Performs NIC resolutions. Applications that use these extensions to the SRC software run on a system other than a C-series Controller.
SAE core API	Controls the behavior of the SRC software. Applications that use these extensions to the SRC software run on a system other than a C-series Controller.

Table 1: Descriptions of SRC Components *(continued)*

Component	Description
Server Components	
Script services	Provides an interface to call scripts that supply custom services such as provisioning policies on a number of systems across a network.
Authorization and Accounting Applications	
AAA RADIUS servers	Authenticates subscribers and authorizes their access to the requested system or service. Accepts accounting data—time active and volume of data sent—about subscriber and service sessions. RADIUS servers run on a system other than a C-series Controller.
SRC Admission Control Plug-In (SRC-ACP)	Authorizes and tracks subscribers' use of network resources associated with services that the SRC application manages.
Flat file accounting	Stores tracking data to accounting flat files that can be made available to external systems that send the data to a rating and billing system.
SRC Volume Tracking Application (SRC-VTA)	Monitors subscriber resource usage to allow service providers to offer flexible usage quotas, limit bandwidth to subscribers that overuse network resources, and to notify subscribers who may have been compromised by viruses or worms that overuse network resources. (Available in the application library.) The SRC-VTA runs on a Solaris platform.
Demonstration Applications (available on the Juniper Networks Web site)	
Enterprise Audit Plug-In	Defines a callback interface, which receives events when IT managers complete specified operations.
Enterprise Manager Portal	<p>Allows service providers to provision services for enterprise subscribers on JUNOSe routers and JUNOS routing platforms and that allows IT managers to manage services.</p> <p>Enterprise Manager Portal can be used with NAT Address Management Portal to allows service providers to manage public IP addresses for use with NAT services on JUNOS routing platforms and to all IT managers to make requests about public IP addresses through the Enterprise Manager Portal.</p>
Intrusion detection and protection (IDP) integration applications	Integrates IDP into an SRC-managed environment to manage malicious traffic sent to or received by subscribers. The IDP integration applications run on a Solaris platform.
Instant Virtual Extranet (IVE) Host Checker integration application	Integrates the IVE Host Checker into an SRC-managed environment to verify that the subscriber systems used to connect to a service provider comply with the service provider's policies. The IVE Host Checker integration application runs on a Solaris platform.

Table 1: Descriptions of SRC Components *(continued)*

Component	Description
Server Components	
Monitoring Agent application	Integrates IP address managers, such as a DHCP server or a RADIUS server, into an SRC-managed network so that the SAE is notified about subscriber events. The Monitoring Agent application runs on a Solaris platform.
Prepaid Account Administration application	Manages prepaid accounts for the prepaid services demonstration application. The Prepaid Account Administration application runs on a Solaris platform.
Prepaid service application	Demonstrates how the SRC software might be used to manage prepaid accounts. The Prepaid service application runs on a Solaris platform.
Residential service selection portals	Provides a framework for building Web applications that allow residential and enterprise subscribers to manage their own network services. It comes with several full-featured sample Web applications that are easy to customize and suitable for deployment. The Residential service selection portals run on a Solaris platform.
Sample enterprise service portal	Lets service providers supply an interface to their business customers for managing and provisioning services.
Traffic-Mirroring Administration application	Manages and monitors mirroring tasks. The Traffic-Mirroring Administration application runs on a Solaris platform.
Traffic-Mirroring Application	Mirrors subscriber traffic on any subscriber access platform supported by the SRC software. Provides the Traffic-Mirroring Administration portal to manage the mirroring of subscriber traffic. The Traffic-Mirroring application runs on a Solaris platform.
Auxiliary Applications	
Application server	Enables J2EE applications, including Web applications, to be used with the SRC software. These third-party applications run on a system other than a C-series Controller.
Other applications	Third-party applications created to run in an SRC environment.