

Cisco Subscriber Edge Services Manager

Cisco Subscriber Edge Services Manager (SESM) is an extensible set of applications for providing on-demand services and service management. Service providers use Cisco SESM to offer and advertise value-added services and to associate these services with their brand identities. Together with the Cisco Service Selection Gateway (SSG), Cisco SESM offers a customized, personal subscriber experience that lets service providers move up the value chain and create a services-based business model.

Product Overview

Cisco SESM allows service providers to create and manage a branded web portal. Service providers use the Cisco SESM web portal to offer revenue-generating services, including IP virtual private networks (VPNs), network-based content filtering, and streaming multimedia.

Cisco SESM includes a sample web portal (Figure 1), illustrating how a New World service provider uses Cisco SESM to offer and advertise value-added services.

Through the use of branded web portals, a subscriber associates online services with the service provider, creating differentiation and switching costs while helping to build customer loyalty.

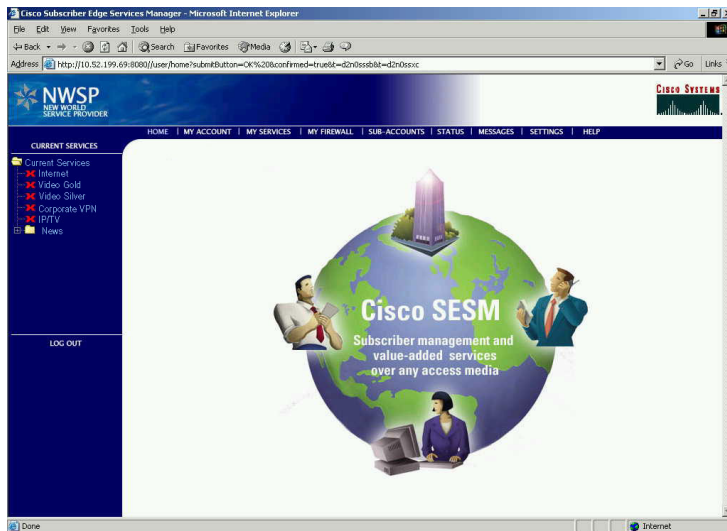
Cisco Security Policy Engine

Cisco SESM and Cisco Security Policy Engine (SPE) integrated bundle combines role-based access control (RBAC) functionality with an open policy server to enable service providers to create differentiated subscriber groups. Cisco SPE works with a Lightweight Directory Access Protocol (LDAP) directory, allowing subscribers to perform account maintenance and self-care activities, and allowing administrators to set subscriber and service policies.

Subscriber Experience

A subscriber accesses the Cisco SESM web portal. Upon successful authentication, the Cisco SESM web portal presents the subscriber with a personalized menu of available on-demand services. The subscriber can select one or more services, and perform account maintenance and self-care enabled by the Cisco SESM/Cisco SPE integrated bundle.

Figure 1
A Branded Web Portal





Key Features and Benefits

Cisco SESM offers the following benefits:

- *Web-based service model*—The Cisco SESM web portal provides subscriber authentication, service authorization, and service connection capabilities, removing the need for client software. Web-based service selection improves flexibility and convenience for subscribers, and enables service providers to bill subscribers based on connect time and services used, rather than charging a flat rate.
- *Service advertisement*—Cisco SESM combines personalized web portals with branding to provide a unique subscriber interface. Service providers can use Cisco SESM web portal to reach subscribers with targeted messages, and thus increase the take rate on new services.
- *Captive portal*—With the ability to redirect a subscriber to a captive portal, service providers can capture a subscriber's attention with account or service messages, such as blocked access to a service or payment requests. This feature can also direct a subscriber to services based on personal interests or location.
- *Walled gardens and open gardens*—This branded service or content environment is available only to authenticated or paid subscribers. Walled gardens allow a service provider to differentiate its offering and keep subscribers within its network. An opening in a walled garden, called an open garden, is used as an inducement to service subscription.
- *Subscriber Personal Firewall*—The Cisco SESM web portal offers each subscriber a personal firewall. Subscribers can configure their personal firewalls to restrict or permit traffic to and from their connection, based on port numbers or IP addresses.
- *Retail pages*—Service providers can offer Web pages with a customized look and feel for each Internet service provider (ISP). Retail pages give each ISP the ability to create a branded portal, while allowing the access provider to participate in the additional revenue that differentiated services can provide.
- *Device and locale awareness*—Cisco SESM recognizes the subscriber's device (ie: PC, PDA, or mobile phone), connection type, language, and region, allowing service providers to offer a web portal that serves multiple locales and devices. Service providers can use Cisco SESM to customize the subscriber experience and make the subscriber as comfortable as possible.
- *Remote Management of SESM Applications*—Cisco SESM allows administrators to configure options, perform management actions, and monitor SESM applications remotely from the Cisco Distributed Administration Tool (CDAT), a web-based management tool.
- *Open architecture*—As a standards-based, Java 2 Enterprise Edition (J2EE)-compliant architecture, Cisco SESM can be integrated with a service provider's existing Web infrastructure. Cisco SESM is bundled with a suitable Java Runtime Environment (JRE), and the Jetty Web server is included with Cisco SESM to provide a complete turnkey solution.

The following features are offered by the Cisco SESM and Cisco SPE integrated bundle:

- *Service subscription*—Cisco SESM and SPE allow subscribers to subscribe to new services through the Cisco SESM web portal, and gain immediate access to those services.
- *Account creation and self-care*—Cisco SESM and SPE let subscribers change account details, including address information and passwords, as well as create sub-accounts for group or family members. This capability relieves the service provider from time-consuming and costly maintenance tasks.



System Requirements

Table 1 lists the system requirements for Cisco SESM.

Table 1 Cisco SESM System Requirements

Operating System and Workstation	<ul style="list-style-type: none">• Linux: Red Hat Linux version 7.1, or SuSE Linux version 7.3• Unix (Solaris 2.6 or later): Sun Ultra10 or Sun E250 (or later version), with 256-MB RAM (512 MB recommended).• Windows NT 4.0: Pentium III or equivalent processor, with 128-MB RAM (256 MB recommended).
Java Support	<ul style="list-style-type: none">• Java 2 Software Development Kit (SDK) 1.2.2 or later is required for development only. Cisco SESM is bundled with Java Runtime Environment (JRE) 1.2.2.
Web Server	<ul style="list-style-type: none">• Cisco SESM is designed to work with any Web server that is J2EE compliant. Cisco SESM is bundled with Jetty Web server version 4.0.1.
Subscriber Web Browser	<ul style="list-style-type: none">• Subscribers must use either Netscape 4.05 or later or Microsoft Internet Explorer 5.01 or later.• Browsers must support JavaScript and should have cookies enabled.

Additional Required Components

Table 2 lists additional components that are required in a Cisco SESM deployment.

Table 2 Additional Required Components

Cisco SSG	<ul style="list-style-type: none">• Cisco SESM requires the SSG feature set available in Cisco IOS® Software Release 12.2(4)B or later.
Remote Access Dial-In User Service (RADIUS)	<ul style="list-style-type: none">• In a RADIUS deployment, Cisco SESM works with any RADIUS-based server that accepts vendor-specific attributes (Cisco Access Registrar recommended).
Lightweight Directory Access Protocol (LDAP)	<ul style="list-style-type: none">• The Cisco SESM and Cisco SPE integrated bundle works with the Novell Network Directory Service (NDS) eDirectory Version 8.5, and with the Sun iPlanet Directory Server

Ordering Information

Where to Buy Cisco Products

http://www.cisco.com/public/ordering_info.shtml

Product and Part Numbers

Product part numbers for the Cisco SESM are given in Table 3.

Table 3 Product Part Numbers for Cisco SESM

Part Number	Description
SESM-RAD-315-EVL	Subscriber Edge Services Manager, RADIUS, evaluation
SESM-RAD-315-50K	Subscriber Edge Services Manager, RADIUS, 50k users
SESM-RAD-315-UNL	Subscriber Edge Services Manager, RADIUS, unlimited
SESM-SPE-315-EVL	Subscriber Edge Services Manager, SPE, evaluation
SESM-SPE-315-50K	Subscriber Edge Services Manager, SPE, 50k users

Documentation

<http://www.cisco.com/univercd/cc/td/doc/solution/sesm/index.htm>



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