



About this Guide

Published: December 23, 2013

Introduction

This document explains how to install and configure the Cisco Service Control Management Suite (SCMS) Subscriber Manager (SM) Login Event Generators (LEGs).

This document is intended for system administrators and integrators who are responsible for the installation, configuration, and maintenance of the LEG components. The administrator or system integrator should be familiar with the following:

- CNR extensions concept
- DHCP protocol
- MPLS/VPN architecture
- RADIUS extensions concept
- RADIUS protocol
- SOAP concepts
- IPDR concepts
- Cisco Service Control Subscriber Management and Subscriber Integration concepts

For complete information about the Cisco SCMS subscriber integration concept, see the [Cisco SCMS Subscriber Manager User Guide](#).

Document Revision History

The following Document Revision History table records the changes made to this document.

Table 1 **Document Revision History**

Revision	Cisco Service Control Release and Date	Change Summary
OL-30590-01	Release 4.1.x December 23, 2013	First version of this document (new for the Release 4.1.x train). Updates for Release 4.1.0: <ul style="list-style-type: none">• Updated the “Installing the DHCP Forwarder” section on page 10-1.• Updated the “Upgrading the DHCP Forwarder” section on page 10-2.• Updated the “Information About Configuring the IPDR LEG” section on page 37-2.• Updated the “Cisco SCE-Sniffer DHCP LEG and SNMP-BG” section on page 14-4.• Updated the “Information About Configuring the SCE-Sniffer DHCP LEG” section on page 15-1.• Added the “Mapping RADIUS Attribute to the Up Vlink ID” section on page 19-18.• Added the “Mapping RADIUS Attribute to the Down Vlink ID” section on page 19-19.

Organization

This guide contains the following sections.

Table 2 *Document Organization*

Section	Title	Description
Chapter 1	Terms and Concepts Relating to Login Event Generators	Describes the terms and concepts used in this SM LEGs guide.
Chapter 2	Cisco Network Registrar Login Event Generator	Describes the Subscriber Manager CNR LEG software module.
Chapter 3	Installing the Cisco Network Registrar Login Event Generator	Describes the CNR LEG installation procedures for both Widows and Solaris platforms. It also describes the uninstall procedure.
Chapter 4	Configuring the Cisco Network Registrar Login Event Generator and the Subscriber Manager	Describes the configuration for the CNR LEG and the Subscriber Manager using the CNR LEG.
Chapter 5	Cisco Network Registrar Log Messages	Describes the log messages written to the CNR Log.
Chapter 6	Cisco Network Registrar Login Event Generator Functional Specification	Describes the CNR LEG design, logging, tracing, and operations performed by the CNR LEG.
Chapter 7	About the DHCP Lease Query Login Event Generator	Describes the Subscriber Manager DHCP Lease Query LEG software module and the terms and concepts used in this guide. It also provides a description of the DHCP Lease Query LEG process and transactions.
Chapter 8	Cisco Service Control Subscriber Manager Integration Configuration	Describes the procedures for configuring and using the software on the Subscriber Manager. It also describes the command-line utility.
Chapter 9	Cisco Service Control Engine Integration Configuration	Describes the procedures for configuring and using the software on a Cisco SCE device. It also describes the CLI.
Chapter 10	DHCP Forwarder Application	Describes the DHCP Forwarder application, installation instructions, and adding and removing a resource.
Chapter 11	About the DHCPv6 Lease Query Login Event Generator	Describes the procedures for configuring and using the software on the Subscriber Manager. It also describes the command-line utility.
Chapter 12	DHCPv6 Subscriber Manager Integration Configuration	Describes the procedures for configuring and using the software on an Cisco SCE device. It also describes the CLI.
Chapter 13	DHCP Forwarder Application Enhancements for DHCPv6	Describes the enhancements to DHCP forwarder application to support DHCPv6.

Table 2 Document Organization (continued)

Section	Title	Description
Chapter 14	The Cisco SCE-Sniffer DHCP Login Event Generator	Describes the Subscriber Manager SCE-Sniffer DHCP LEG software module and the terms and concepts used in this guide. It also provides a description of the SCE-Sniffer DHCP LEG operation and transactions.
Chapter 15	Configuring the Cisco SCE-Sniffer DHCP Login Event Generator	Describes the configuration procedure for the SCE-Sniffer DHCP LEG on the SM and configuring the Package Association.
Chapter 16	Using the Cisco SCE-Sniffer DHCP Login Event Generator Command-Line Utility	Provides a description of the command-line utility commands when the software is installed on the Subscriber Manager.
Chapter 17	Overview of the RADIUS Listener Login Event Generator	Describes the Subscriber Manager RADIUS listener LEG software module and the terms and concepts used in this guide.
Chapter 18	Installing the RADIUS Listener Login Event Generator	Describes the procedures for installing the software on the subscriber manager (SM). It also describes uninstalling the software.
Chapter 19	Configuring the RADIUS Listener Login Event Generator	Describes the configuration procedure for the RADIUS listener LEG.
Chapter 20	Configuring the RADIUS Client	Describes the configuration procedure for the RADIUS client.
Chapter 21	Using the RADIUS Listener Login Event Generator Command Line Utility	Provides a description of the command-line utility commands when the software is installed on the Subscriber Manager.
Chapter 22	Domain Association Algorithm	Describes the algorithm used for deciding the subscriber domain to which a subscriber should be logged on.
Chapter 23	About the SCE-Sniffer RADIUS Login Event Generator	Describes the SCE-Sniffer RADIUS LEG software module, and terms and concepts.
Chapter 24	SCE-Sniffer RADIUS Login Event Generator Functionality	Provides a description of SCE-Sniffer RADIUS LEG transactions for login and logout operations.
Chapter 25	Configuring the SCE-Sniffer RADIUS Login Event Generator	Provides the configuration instructions to configure the SCE-Sniffer RADIUS LEG.
Chapter 26	Using the SCE-Sniffer RADIUS Login Event Generator Command-Line Utility	Describes the Command-Line Utilities to retrieve information and statistics about the LEG.
Chapter 27	About the Multiprotocol Label Switching/Virtual Private Network Border Gateway Protocol Login Event Generator	Describes the MPLS/VPN BGP LEG software module, and terms and concepts.
Chapter 28	Installing the MPLS/VPN Border Gateway Protocol Login Event Generator	Describes the installation process for installing the SM MPLS/VPN BGP LEG.

Table 2 **Document Organization (continued)**

Section	Title	Description
Chapter 29	Configuring the MPLS/VPN BGP LEG	Provides the configuration instructions to configure the MPLS/VPN BGP LEG.
Chapter 30	Using the MPLS/VPN BGL LEG Command-Line Utility	Describes the Command-Line Utility to control the operation of the MPLS/VPN BGP LEG and to retrieve information and statistics about the LEG.
Chapter 31	About the Simple Object Access Protocol Login Event Generator	Describes the SOAP LEG software module, and terms and concepts.
Chapter 32	Configuring the Simple Object Access Protocol Login Event Generator	Provides the configuration instructions to configure the SOAP LEG.
Chapter 33	Using the Simple Object Access Protocol Login Event Generator Command-Line Utility	Provides a description of the command-line utility commands when the software is installed on the Subscriber Manager.
Chapter 34	Cisco Web Services Description Language	Provides the Cisco WSDL.
Chapter 35	About the Internet Protocol Detail Record (IPDR) Login Event Generator	Describes the IPDR LEG software module, and terms and concepts.
Chapter 36	Internet Protocol Detail Record Login Event Generator Templates	Provides the details of IPDR LEG templates.
Chapter 37	Configuring the IPDR Login Event Generator	Provides the configuration instructions to configure the IPDR LEG.
Chapter 38	Using the Internet Protocol Detail Record Login Event Generator Command-Line Utility	Provides a description of the command-line utility commands when the software is installed on the Subscriber Manager.

Related Publications

Use the *Cisco Service Control Subscriber Manager LEGs User Guide* in conjunction with the following Cisco documentation:

- [Cisco Service Control Subscriber Manager User Guide](#)
- [Cisco Service Control Application for Broadband User Guide](#)

Conventions

This document uses the following conventions.

Table 3 **Document Conventions**

Convention	Indication
bold font	Commands and keywords and user-entered text appear in bold font .
<i>italic font</i>	Document titles, new or emphasized terms, and arguments for which you supply values are in <i>italic font</i> .
[]	Elements in square brackets are optional.
{ x y z }	Required alternative keywords are grouped in braces and separated by vertical bars.
[x y z]	Optional alternative keywords are grouped in brackets and separated by vertical bars.
string	A nonquoted set of characters. Do not use quotation marks around the string or the string will include the quotation marks.
courier font	Terminal sessions and information the system displays appear in <code>courier font</code> .
< >	Nonprinting characters such as passwords are in angle brackets.
[]	Default responses to system prompts are in square brackets.
!, #	An exclamation point (!) or a pound sign (#) at the beginning of a line of code indicates a comment line.



Note

Means *reader take note*.



Tip

Means *the following information will help you solve a problem*.



Caution

Means *reader be careful*. In this situation, you might perform an action that could result in equipment damage or loss of data.



Timesaver

Means *the described action saves time*. You can save time by performing the action described in the paragraph.



Warning

Means *reader be warned*. In this situation, you might perform an action that could result in bodily injury.

Obtaining Documentation and Submitting a Service Request

For information on obtaining documentation, submitting a service request, and gathering additional information, see the monthly *What's New in Cisco Product Documentation*, which also lists all new and revised Cisco technical documentation, at:

<http://www.cisco.com/en/US/docs/general/whatsnew/whatsnew.html>

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