



Preface

This document explains the Cisco Service Control Management Suite (SCMS) Subscriber Manager (SM) C/C++ application programming interface (API).

The SCMS SM C/C++ API is used for updating, querying, and configuring the subscriber manager (SM). It consists of two parts, which may be used separately or together without restriction:

1. SM Nonblocking C/C++ API—A high-performance API with low visibility to errors and other operation results. Supports automatic integrations with OSS/AAA systems.
2. SM Blocking C/C++ API—A more user-friendly API. Supports user interface applications for accessing and managing the SM.



Note

A set of APIs with the same functionality is also available for the Java environment.

This guide is for the networking or computer technician responsible for configuring the subscriber manager. It is also intended for the operator who manages Cisco Service Control Engine (SCE) platforms.

Document Revision History

The Document Revision History below records changes to this document.

Revision	Cisco Service Control Release and Date	Change Summary
OL-7203-07	3.1.6 May, 2008	Private IP address over VPN and private IP range over VPN are now supported for the Network ID. See Information About Network ID Mappings, page 2-8 and Specifying Private IP Address or Private IP Range over VPN Mapping, page 2-9 .
OL-7203-06	3.1.5 November, 2007	The mapping type VLAN is deprecated and is replaced by the mapping type VPN. See Information About Network ID Mappings, page 2-8 .
OL-7203-05	3.1.0 May, 2007	<ul style="list-style-type: none">• Support for moving subscribers between domains. See Subscriber Domains, page 2-10 and the Parameters, page 3-5 section of the login method.• Updated Subscriber Name Format, page 2-7.

Revision	Cisco Service Control Release and Date	Change Summary
OL-7203-04	3.0.5 November, 2006	<ul style="list-style-type: none"> Added the reconnect timeout parameter to the C++ init method. See C++ init Method, page 3-31 and C++ init Method, page 4-6. Added the <code>setReconnectTimeout</code> method. See setReconnectTimeout, page 3-33 and setReconnectTimeout, page 4-7.
OL-7203-03	3.0.3 May, 2006	Updated documentation for Release 3.0.3.
OL-7203-02	3.0 December, 2005	Reorganized the documentation. No major changes or new features were added to this revision.
OL-7203-01	2.5.7 May, 2005	First version of this document.

Organization

This guide contains the following sections:

Chapter	Description
Chapter 1, “Getting Started”	Describes the platforms on which the C/C++ API can be used, and how to install, compile, and start running the C/C++ API component.
Chapter 2, “General API Concepts”	Describes various concepts that are used when working with the SM C/C++ API.
Chapter 3, “Blocking API”	Describes features and operation of the blocking API and provides code examples.
Chapter 4, “Nonblocking API”	Describes features and operation of the nonblocking API and provides code examples.
Appendix A, “List of Error Codes”	Lists error codes that are used in the C/C++ API.

Related Documentation

Use this *SCMS SM C/C++ API Programmer Guide* in conjunction with all of the SCMS Subscriber Manager user, API, and reference guides.

Conventions

This document uses the following 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.
<code>courier font</code>	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

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