



## About this Guide

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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**

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

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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-7203-08	3.5.0 June 15, 2009	Updated error codes list. See <a href="#">List of Error Codes, page A-1</a> . Added note to the “ <a href="#">How to Install the SCMS SM C/C++ API</a> ” section on page 1-2.
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 <a href="#">Information About Network ID Mappings, page 2-8</a> and <a href="#">Specifying Private IP Address or Private IP Range over VPN Mapping, page 2-9</a> .
OL-7203-06	3.1.5 November, 2007	The mapping type VLAN is deprecated and is replaced by the mapping type VPN. See <a href="#">Information About Network ID Mappings, page 2-8</a> .

Revision	Cisco Service Control Release and Date	Change Summary
OL-7203-05	3.1.0 May, 2007	<ul style="list-style-type: none"> <li>Support for moving subscribers between domains. See <a href="#">Subscriber Domains, page 2-10</a> and the <a href="#">Parameters, page 3-5</a> section of the login method.</li> <li>Updated <a href="#">Subscriber Name Format, page 2-8</a>.</li> </ul>
OL-7203-04	3.0.5 November, 2006	<ul style="list-style-type: none"> <li>Added the reconnect timeout parameter to the C++ init method. See <a href="#">C++ init Method, page 3-30</a> and <a href="#">C++ init Method, page 4-5</a>.</li> <li>Added the <code>setReconnectTimeout</code> method. See <a href="#">setReconnectTimeout, page 3-33</a> and <a href="#">setReconnectTimeout, page 4-6</a>.</li> </ul>
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:

Section	Title	Description
1	<a href="#">Getting Started, page 1-1</a>	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.
2	<a href="#">General API Concepts, page 2-1</a>	Describes various concepts that are used when working with the SM C/C++ API.
3	<a href="#">Blocking API, page 3-1</a>	Describes features and operation of the blocking API and provides code examples.
4	<a href="#">Nonblocking API, page 4-1</a>	Describes features and operation of the nonblocking API and provides code examples.
A	<a href="#">List of Error Codes, page A-1</a>	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
<b>bold font</b>	Commands and keywords and user-entered text appear in <b>bold font</b> .
<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

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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