



# CHAPTER 1

## Getting Started

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This module describes the platforms on which the Java API can be used and how to install, compile, and start running the API.

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## Information About the Java API

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## Introduction

The Java API is used for updating, querying, and configuring the SCMS Subscriber Manager (SM). It consists of two parts, which can be used separately or together without restriction.

- SM Non-blocking Java API—A high-performance API with low visibility to errors and other operation results. It supports automatic integrations with OSS/AAA systems.
- SM Blocking Java API—A more user-friendly API. It supports user interface applications for accessing and managing the SM.

## Platforms

The SM Java API was developed and tested on a Windows platform, but it is operable on any platform that supports Java version 1.4.

## Package Content

For brevity, `<installdir>` refers to the installation directory `sm-java-api-vvv.bb`.

The `<installdir>/javadoc` folder contains the API JAVADOC documentation.

The `<installdir>/lib` folder contains the `smapi.jar` file, which is the API Executable. It also contains additional jar files necessary for the API operation.

**Table 1-1**      *Layout of Installation Directory*

Path	Name	Description
<code>&lt;installdir&gt;</code>		
	README	API readme file
<code>&lt;installdir&gt;/javadoc</code>		
	index.html	Index of all API specifications
	(API specification files, etc.)	API specification documents
<code>&lt;installdir&gt;/lib</code>		
	smapi.jar	SM API executable
	asn1rt.jar	Utility jar used by the API
	jdmkrt.jar	Utility jar used by the API
	ilog4j.jar	Utility jar used by the API
	log4j.properties	Property file needed for the API logging functionalities
	xerces.jar	Utility jar used by the API
	jce-jdk13-133.jar	Provides an implementation of the Java Cryptography Extension API.

## How to Install the Java API

The Java API distribution is part of the SCMS SM-LEG distribution file and is located in the `SM_API` directory

The Java SM API is packaged in a UNIX tar file. You can extract the Java SM API using the UNIX tar utility or most Windows compression utilities.

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## Subscriber Manager Setup

The API connects to the PRPC server on the SM. For the API to work:

- The SM must be up and running, and reachable from the machine that hosts the API
- The PRPC server must be started.

The PRPC server is a proprietary RPC protocol designed by Cisco. For more information about the PRPC server, see the *Cisco SCMS Subscriber Manager User Guide* .

## Installing on a UNIX Platform



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**Note** The abbreviations **vvv** and **bb** stand for the Java SM API version and build number.

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- Step 1** Extract the SCMS SM-LEG distribution file.
- Step 2** Locate the Java SM API distribution tar **sm-java-api-dist.tar**
- Step 3** Extract the Java SM API distribution tar and obtain the sm-java-api-**vvv**.bb.tar
- ```
#>tar -xvf sm-java-api-dist.tar
```
- Step 4** Extract the Java SM API package tar
- ```
#>tar -xvf sm-java-api-vvv.bb.tar
```
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## Installing on a Windows Platform

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- Step 1** Use a zip extractor (such as WinZip)
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## Compiling and Running

To compile and run a program that uses the SM Java API, **smapi.jar** must be in the CLASSPATH.

For example, if the program source is in **SMApiProgram.java** , use the following command line to compile the program:

```
#>javac -classpath smapi.jar SMApiProgram.java
```

After compiling the program, use the following command line to run the program:

```
#>java -cp .;<installdir>/lib/smapi.jar SMApiProgram
```

