

# **GENESYS**

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# SIP Endpoint SDK Deployment Guide

SIP Endpoint SDK 8.1.20SX

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# Deployment Guide

### Installation

This deployment guide describes how to install SIP Endpoint SDK for Apple OS on your Macintosh and verify the installation. It includes the following information:

- Deployment Information—Details related to the SIP Endpoint SDK installation, including prerequisites and links to related information. Genesys recommends reading this page before beginning your installation, to ensure that your system meets the minimum requirements for the SIP Endpoint SDK.
- Installation procedures
- Verification procedures—This includes tasks for walking through the installation process and verifying that components were installed correctly.

### Next Steps

After you have successfully installed the SIP Endpoint SDK, you might want to do the following:

- Download the latest version of the Release Note (using links on the SIP Endpoint SDK for Apple OS Product Page) to see the most recent news and updates about this product.
- Review the pages on using the included OS X sample application.
- Find out more about how to configure SIP Endpoint SDK for OS X.
- Read the SIP Endpoint SDK API Reference for detailed information about the SIP Endpoint SDK.

## New In This Release

Check out the new features that have been added in the latest releases of SIP Endpoint SDK for Apple OS.

### New in Release 8.1.2 for Apple OS

- SIP Endpoint SDK 8.1.2 for Apple OS supports OS X Mountain Lion (10.8)
- This release of SIP Endpoint SDK for Apple OS supports the following codecs:
  - G.711 (PCMA, PCMU)
  - G.722
  - iLBC (Internet Low Bitrate Codec)
  - iSAC (Internet Speech Audio Codec)
  - VP8 video
- SIP Endpoint SDK 8.1.2 for Apple OS supports the following Plantronics headset models in the standard headset mode:
  - Savi W440
  - Savi W7xx
  - Blackwire C320

SIP Endpoint SDK 8.1.2 for Apple OS also supports the following features:

- TLS 1.2 protocol (RFC 6176)
- · AGC (Automatic Gain Control)
- MWI (Message Waiting Indicator)
- You can now specify these behaviors when a SIP Endpoint user does not have a working USB headset:
  - Whether SIP Endpoint should automatically reject an incoming call
  - The SIP error code to be sent to the inviting party
- INVITE messages now have an additional header that contains user data. This data can be obtained by using the following new method of GSSessionControlService:

```
- (GSResult) dialFrom:(id<GSConnection>)connection
to:(NSString*)destination withData:(NSString *)data;
```

- · Hangup on RTP inactivity timeout
- · Configuration of:
  - RTP port ranges

- SIP port ranges
- · Continuous Registration
- · DTMF tones can now be sent using SIP INFO
- · VoIP monitoring of packet jitter and latency using RTP statistics
- NAT (Network Address Translation) traversal methods:
  - ICE (Interactive Connectivity Establishment)
  - STUN (Session Traversal Utilities for NAT)
  - TURN (Traversal Using Relay NAT)
- Connection to Genesys SIP Cluster

In addition, this release of SIP Endpoint SDK for Apple OS uses a SIP stack that has been developed by Genesys.

## New in Release 8.1.1 for Apple OS

- SIP Endpoint SDK 8.1.1 for Apple OS supports OS X Lion (10.7)
- This release of SIP Endpoint SDK for Apple OS supports the following voice codecs:
  - G.711 (PCMA, PCMU)
  - G.722
  - iLBC (Internet Low Bitrate Codec)
- When devices and services use multiple voice codecs, the SIP Endpoint SDK for Apple OS supports the negotiation of the voice codec that will be used between them.
- The SIP Endpoint SDK for Apple OS supports Quality of Service (QoS), which helps guarantee that packet traffic for a voice or other media connection will not be delayed or dropped due to interference.
- The SIP Endpoint SDK for Apple OS supports additional security signaling and media encryption via SRTP (Secure Real-Time Transport Protocol).
- The SIP Endpoint SDK for Apple OS supports both first party call control (1PCC) and third party call control (3PCC).

# SIP Endpoint for Apple OS Deployment Information

### Introduction

With Release 8.1.2, the SIP Endpoint SDK for Apple OS allows you to develop applications for OS X Mountain Lion (10.8).

To assist you with development, the SIP Endpoint SDK is packaged with an API Reference, which is located in the Doc/html folder.

For your convenience, the SIP Endpoint SDK also includes a Sample application that can help you get up and running during early application development.

Finally, every Genesys product also includes a Release Note that provides any late-breaking product information that could not be included in the manual. This product information can often be important. To view it, open the read\_me.html file in the application home directory, which contains a link to the latest Release Note for this product.

### What You Should Know

This guide is written for software developers and application architects who have already developed an understanding of the Genesys platform and the basics of SIP telephony. Before working with the SIP Endpoint SDK, you should also know how to use the logging functionality of the Platform SDK.

In addition, the following document can be useful in understanding the Genesys SIP server environment:

• Framework 8.0 SIP Server Deployment Guide

## **Environment Prerequisites**

To work with the SIP Endpoint SDK for Apple OS, you must ensure that your system meets the software requirements established in the Genesys Supported Operating Environment Reference Manual, as well as meeting the following minimum software requirements:

- Genesys SIP Server 7.6.x, 8.0.2, or higher
- OS X Mountain Lion (10.8)
- · Xcode version 4.2.3 or higher

## Related Resources

- SIP Endpoint SDK Overview
- SIP Endpoint SDK Developer's Guide

# Installing SIP Endpoint SDK for Apple OS

### Prerequisites

• Check the list of environment prerequisites, and confirm that your system meets these standards prior to installing SIP Endpoint SDK.

### Procedure

### Start of procedure

- 1. Copy the zip archive containing the SIP Endpoint SDK for Apple OS from your product CD to your desired installation location.
- 2. Unzip the archive.
- 3. Copy the ip\_description.xml and read\_me.html files from your product CD into the root level of the unzipped archive.
- 4. Copy the Log4Cocoa.framework and SipEndpoint.framework folders located in the Bin folder of your installation to the /Library/Frameworks folder on your computer.
- 5. Copy the libresample.dylib.1 file located in the ThirdParty folder of your installation to the /usr/lib folder on your computer.

#### **End of procedure**

### **Next Steps**

• To review the installation of your SIP Endpoint SDK files, continue by verifying the installed components.

# Verifying Installed SIP Endpoint SDK for Apple OS Components

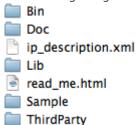
### Prerequisites

• You must first complete the procedure that is found at Installing for Apple OS.

### Procedure

#### Start of procedure

- 1. Use the Finder to locate the folder that you unzipped during the SIP Endpoint SDK installation.
- 2. Confirm that the SIP Endpoint SDK components contained in this folder look similar to what is shown in the following image:



- 3. Examine each folder (including the root installation folder) to confirm its contents. The SIP Endpoint SDK Folder Contents table below gives a description of the expected result.
- 4. Verify that the /Library/Frameworks folder on your computer contains the Log4Cocoa.framework and SipEndpoint.framework folders.
- 5. Verify that the /usr/lib folder on your computer contains the libresample.dylib.1 file.

#### **End of procedure**

#### **Next Steps**

None

### **SIP Endpoint SDK Folder Contents**

Folder	Contents
1	The root directory contains the following two files:

Folder	Contents
	<ul> <li>ip_description.xml—This file contains data for the read_me.html file.</li> <li>read_me.html—This Read Me file identifies the build number, platform compatibility, and a link to the latest Release Note.</li> </ul>
/Bin	This directory contains the Log4Cocoa.framework and SipEndpoint.framework, as well as the SipEndpoint Sample.app
/Doc	The html folder inside this directory contains the SIP Endpoint SDK API Reference, which has detailed information about the structure and usage of the SIP Endpoint SDK for Apple OS. This directory also contains the Third Party Software Notices.
/Lib	Contains a copy of SipEndpoint.framework.
/Sample	Contains the source code for the sample application. <ref name="sample_app">For more information about the sample application included with this release, see SIP Endpoint SDK OS X Sample Application.</ref>
/ThirdParty	<ul> <li>This directory contains the following two files:</li> <li>libresample.dylib.1, which should be copied into /usr/lib</li> <li>ReadMeFirst.rtf, which gives the path where libresample.dylib.1 has to be copied</li> </ul>

<sup>&</sup>lt;references />