

# **GENESYS**<sup>®</sup>

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## Genesys Driver for SMS and MMS Guide

Security and Privacy

2/13/2025

# Security and Privacy

This page contains the following information on configuring security and privacy settings for Genesys Driver for SMS and MMS.

- Configuring security
- Configuring privacy

### Configuring security

By default, the driver connects to the SMSC (Short Message Service Center) without any security. However, the driver can use TLS (Transport Layer Security) to connect to the SMSC.

The following section documents how to set up a host certificate.

#### Configuring the TLS connection

You must add or edit the following options at the channel level:

x-smpp-tls-mode



- x-smpp-tls-path-to-certificate
- x-smpp-tls-certificate-file-password
- x-smpp-tls-certificate-password

#### Important

The options **x-smpp-tls-certificate-file-password** and **x-smpp-tls-certificatepassword** are not protected or encrypted. You can hide these options in the driver's log files (see the driver administration page for more information), but they are visible in Genesys administration tools such as Genesys Administrator or Genesys Administrator Extension (GAX).

#### Use cases

TLS mode 'single'

- Default Java key store is used (file is in **<JRE\_folder>\lib\security\cacerts**):
  - x-smpp-tls-mode = single
  - x-smpp-tls-version = Set as needed
- Your private key store is used (only certificates from this key store are available for the driver):
  - x-smpp-tls-mode = single
  - x-smpp-tls-version = Set as needed
  - x-smpp-tls-path-to-certificate = Set to the location of the PKCS#12 file that contains the SMSC's host certificate with related certificate chains
  - x-smpp-tls-certificate-file-password
  - x-smpp-tls-certificate-password

TLS mode 'mutual'

- Your private key store is used (only certificates from this key store are available for the driver):
  - x-smpp-tls-mode = mutual
  - x-smpp-tls-version = Set as needed
  - x-smpp-tls-path-to-certificate = Set to the location of the PKCS#12 file that contains the SMSC's host certificate with related certificate chains and private key of the driver's certificate
  - x-smpp-tls-certificate-file-password
  - x-smpp-tls-certificate-password

#### Possible problems

This section documents some common problems that you might encounter and samples of accompanying log errors.

Certificate file is not trusted by SMSC

at sun.security.ssl.Handshaker.fatalSE(Handshaker.java:302)

SMSC is not trusted certificate for your certificate:

17:24:36.800 Std 43009 (channel-opensmpp).(oSmpp.openAndBind): error... SMSC close socket connection. Maybe SMSC don't trust your certificate

17:24:36.802 Std 43011 (channel-opensmpp).(oSmpp.openAndBind): exception caught and processed... \*\*\* Start of Trace \*\*\*

java.lang.Exception: SMSC close socket connection. Maybe SMSC don't trust your certificate

at com.genesyslab.mcr.smserver.channel.sms\_mms.opensmpp.SmppDriver.handleExceptionForTLS(SmppDriver.java:612)

at com.genesyslab.mcr.smserver.channel.sms\_mms.opensmpp.SmppDriver.openAndBind(SmppDriver.java:450)

Password for certificate file is invalid

17:26:23.207 Std 43010 (channel-opensmpp).(oSmpp.initialize): error... failed to initialize ssl context: keystore password was incorrect 17:26:23.208 Std 42403 (PU channel-opensmpp).(<init>): exception caught and processed... \*\*\* Start of Trace \*\*\*

java.lang.Exception: channel driver initiaization failed

- at com.genesyslab.mcr.smserver.channel.sms\_mms.opensmpp.SmppDriver.initialize(SmppDriver.java:178)
- at com.genesyslab.mcr.smserver.channel.ChannelPU.<init>(ChannelPU.java:123)
- at com.genesyslab.mcr.smserver.channel.ChannelConnectors.processChannelSection(ChannelConnectors.java:302)
- at com.genesyslab.mcr.smserver.channel.ChannelConnectors.configure(ChannelConnectors.java:185)
- at com.genesyslab.mcr.smserver.SmServer.initServer(SmServer.java:245)
- at com.genesyslab.mcr.smserver.SmServer.main(SmServer.java:130)

\*\*\* End of Trace \*\*\*

Password for your certificate is invalid

#### Security and Privacy

17:28:06.713 Std 43010 (channel-opensmpp).(oSmpp.initialize): error... failed to initialize ssl context: Get Key failed: Given final block not properly padded

17:28:06.715 Std 42403 (PU channel-opensmpp).(<init>): exception caught and processed...

\*\*\* Start of Trace \*\*\*

java.lang.Exception: channel driver initiaization failed

- at com.genesyslab.mcr.smserver.channel.sms mms.opensmpp.SmppDriver.initialize(SmppDriver.java:178)
- at com.genesyslab.mcr.smserver.channel.ChannelPU.<init>(ChannelPU.java:123)
- at com.genesyslab.mcr.smserver.channel.ChannelConnectors.processChannelSection(ChannelConnectors.java:302)
- at com.genesyslab.mcr.smserver.channel.ChannelConnectors.configure(ChannelConnectors.java:185)
- at com.genesyslab.mcr.smserver.SmServer.initServer(SmServer.java:245)
- at com.genesyslab.mcr.smserver.SmServer.main(SmServer.java:130)

\*\*\* End of Trace \*\*\*

## Configuring privacy

#### Session mode

SMS sessions are implemented via chat sessions in Chat Server. Therefore, filtering and masking of PII (personally identifiable information) happens in Chat Server.

Chat Server reads PII rules from Universal Contact Server (UCS) and then applies these rules to messages within chat transcripts. Refer to the Masking Sensitive Data page in the Chat Server Administration Guide for more information. Also, refer to the Privacy Manager Guide for more information on using Privacy Manager to configure PII rules.

#### Page mode

For page mode, you must send PII requests from the business process. You can use the following ESP requests from the strategy:

- DataByGroup
- DataByRule
- DataByRegEx

The following is a sample:

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Service:	PiiFindAndReplace							
Method:	DataByRegEx							
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