



This PDF is generated from authoritative online content, and is provided for convenience only. This PDF cannot be used for legal purposes. For authoritative understanding of what is and is not supported, always use the online content. To copy code samples, always use the online content.

SIP Feature Server Deployment Guide

Hardware and software prerequisites

4/16/2025

Contents

- 1 Hardware and software prerequisites
 - 1.1 Hardware
 - 1.2 Software
 - 1.3 Device management
 - 1.4 Sizing
 - 1.5 Cassandra
 - 1.6 Ports

Hardware and software prerequisites

Before you install Feature Server, ensure that your system is equipped with the hardware, software and other related requirements detailed in this section.

Hardware

The following table lists the hardware requirements:

Category	Prerequisite
Host	Install Feature Server on its own dedicated host, unless you are deploying to a small or lab environment. Do not co-locate any other applications on this host.
Operating system	<p>To view supported operating systems, see the Genesys Supported Operating Environment Reference Guide.</p> <ul style="list-style-type: none">• All Feature Servers in your environment must run on either Linux or Windows. You cannot mix Linux and Windows machines.• If you are running RHEL 7/8/9, you must:<ul style="list-style-type: none">• Install all RHEL 7/8 compatibility packages• Install libcurl.so.3 (64-bit only) (Feature Server requires libcurl 3.0.0 to start).• Create a symbolic link for libcurl.so.3 (64-bit only):<pre>cd /usr/lib64 ln -s /usr/lib64/libcurl.so.4.3.0 ./libcurl.so.3</pre>
RAM	4GB of RAM or above available to the Java process.

Software

The following table lists the software requirements:

Category	Prerequisite
Java Runtime Environment (JRE)	SIP Feature Server 8.1.204 and later: Supported Java

Category	Prerequisite
	<p>Runtime Environments: OpenJDK 17.</p> <p>SIP Feature Server 8.1.203 and earlier: Supported Java Runtime Environments: JRE 7, JRE 8, OpenJDK 8, OpenJDK 11, and OpenJDK 17.</p> <p>Java heap size By default, the Java heap size is set to 1GB in launcher.xml. To avoid java heap memory error, increase the java heap size to 1/4th of the system's RAM size as this is the maximum permissible Java heap size. To increase the Java heap size, update the default value of the jvm_option2 option in launcher.xml. Below is an example launcher.xml file for a Feature Server machine that has 16GB RAM with a 4GB java heap size.</p> <pre><parameter name="jvm_option2" displayName="jvm_option2" mandatory="true" hidden="true" readOnly="true"> <description><![CDATA[Cassandra related]]></description> <valid-description><![CDATA[]]></valid- description> <effective-description/> <format type="string" default="-Xmx4g" /> <validation></validation> </parameter></pre> <p>Note: If you are using the launcher_64 executable, you will need to update launcher_64.xml instead of launcher.xml.</p>
Python 3	Supported Python versions: 3.8, 3.9.
Genesys requirements	<p>Install and configure:</p> <ul style="list-style-type: none"> • Genesys Management Framework: See the Genesys Administrator Management Framework Deployment Guide for details. • Genesys Media Server 8.5.x (recommended) or 8.1.5 (minimum) components: Resource Manager and Media Control Platform. See Genesys Media Server 8.5 Deployment Guide. • Genesys Administrator Extension: 8.1.400.59 or higher. See the Genesys Administrator Extension Deployment Guide for details. • Genesys SIP Server <ul style="list-style-type: none"> • A SIP Server 8.1.1 (or later) instance for managing agents: ACD functionality requires SIP Server 8.1.101.56 or later. Note: If you want to use an existing premise SIP Server to also process voicemail, you must use SIP Server version 8.1 or higher. • To provision phones with Feature Server

Category	Prerequisite
	<p>version 8.1.201.52 or later requires SIP Server version 8.1.101.75 or later. See the Genesys SIP Server Deployment guide for details.</p> <p>See the Genesys SIP Server Deployment Guide for details.</p> <ul style="list-style-type: none">• All application templates: Use the supplied templates for SIP Feature Server.

Device management

You can manage SIP desk phones from Polycom, AudioCodes, Genesys, and Yealink using the [SIP Device Management](#) area of Genesys Administrator Extension (GAX). If you require this feature, then install and configure the following:

- Syslog server (mandatory)
- LDAP server (optional)
- NTP server (optional)

For details on the implementation, see [Implement device management](#).

Sizing

Feature Server provides three tools to help you size your environment:

- To calculate the database (embedded Cassandra) disk space requirements for voicemail and device management, enter your information in column B of the [SIP Feature Server 8.1.2 Sizing Guide](#). The guide also calculates network disk space needed for device management functionality.
- To calculate sizing requirements that match your performance needs, [use this Feature Server Sizing Tool](#).
- Feature Server requires a minimum of one Cassandra node per data center. However, it is also based on the number of replicas that are required in a data center to provide resiliency and fault tolerance.
- For help with other sizing requirements, view [Voicemail Performance Test Results](#).

Cassandra

You should configure Genesys SIP Feature Server to use separately deployed Cassandra cluster. You can also co-locate Cassandra nodes with Feature Server or have them deployed using separate

infrastructure. For more details on Cassandra deployment, refer Cassandra documentation.

Genesys recommends to have the following minimum hardware and software requirements to set up the Cassandra nodes.

Category	Requirements
Operating System	All Cassandra nodes in your environment must run on either Linux or Windows. You cannot mix Linux and Windows machines. The clocks on all the Cassandra nodes and Feature Server must be synchronized.
RAM	8 GB of RAM or above.
Runtime environment	For Cassandra 2.2.x, JDK 1.8, 64 bit For Cassandra 3.x, JDK 1.8, 64 bit For Cassandra 4.x, JDK 1.8, 64 bit
User resource limits	For Linux environment, ensure that the following user resource limits are present and use the <code>ulimit -a</code> command to view the current limits: <ul style="list-style-type: none">• memlock - unlimited• nofile - 100000• nproc - 32768• as - unlimited

Ports

Important

Do not use the following ports for any other applications that share the host on which you install Feature Server/Cassandra.

Feature Server Nodes

Feature Server uses the following default ports.

Port	Used for
8080	http
8443	https
8800	Dial plan

Cassandra Nodes

Cassandra nodes use the default ports such as 7000, 7001, and 9042.

Port	Used for
7000	Cassandra Storage_port
7001	Cassandra SSL_Storage_port
9042	CQL port (Cassandra v2.2, Cassandra v3.x, Cassandra 4.x)

Important

If you use Embedded Cassandra and/or versions of Feature Server prior to 8.1.203.XX, you might need ports 9160 and 7199/9192 available for thrift and JMX communications.