Genesys Mobile Services Deployment Guide

Implementing IPv6

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Implementing IPv6

Overview

Internet Protocol version 6, commonly known as IPv6, is a network layer protocol for packet-switched inter-networks. It is designated as the successor of IPv4, the current version of the Internet Protocol, for general use on the Internet. Genesys Mobile Services (GMS) supports IPv6.

Note: Refer to the *Framework 8.1 Deployment Guide* for more information about IPv6. In particular, see the IPv6 Appendix.

Genesys Environment Variable

When to use an environment variable:

- If an IPv6 connection is to be established before an application is able to, or must, read information from Configuration Server.

- If you want all Genesys applications on the same host to support IPv6. You only have to configure the host once, rather than configure each application on that host individually. In addition, this host-level setting will override any application-level setting.

Set the environment variable GCTI_CONN_IPV6_ON to true, represented by any non-zero value, to enable IPv6. The default value of this environment variable is false (0), indicating that IPv6 support is disabled. This default value ensures backward compatibility.

Genesys Configuration Option

Do **not** use this procedure if:

- An IPv6 connection is to be established before an application is able to, or must, read information from Configuration Server.

- You want all Genesys applications on a specific host to support IPv6, and you want to set it only once.

Using either Genesys Administrator or Configuration Manager, set the following configuration option in the common section of the options of the component's Application object:

enable-ipv6

Valid Values:

0 - Off (default), IPv6 support is disabled.

1 - On, IPv6 support is enabled.

Mixed IPv4 and IPv6 Environments

You can configure IPv6 and IPv4 in the same environment. In this mixed environment, you can configure connections with servers that support IPv4, IPv6, and both.

To configure this choice, use the Transport parameter, ip-version on the Advanced tab of the Connection Info dialog box for the connection:

ip-version

Default Value: 4,6

Valid Values: 4,6 and 6,4

Specifies the order in which IPv4 (4) and IPv6 (6) are used for the connection with a server that has a mixed IPv4/IPv6 configuration. This parameter has no effect if the environment variable GCTI_CONN_IPV6_ON or the option enable-ipv6 is set to 0. Management Framework components do not support this option. This option also has no affect on connections to Configuration Server that are established before the option value can be read from the Configuration Database.

Java Properties

You can use the following system properties:

- java.net.preferIPv4Stack
- java.net.preferIPv6Addresses

Limitations for Linux Systems

If you are using Centos or RedHat, you will need to disable IPv6 connections. You can also check official recommendations for Centos 6 and Centos 7.

To force GMS to use IPv4, edit the `launcher.xml` file and add the following lines:

```
<parameter name="jvm_option04" displayName="jvm_option04"  mandatory="true"
hidden="true" readOnly="true">
    <description><![CDATA[Network disable IPv6]]></description>
    <valid-description><![CDATA[]]></valid-description>
    <effective-description/>
    <format type="string" default="-Djava.net.preferIPv4Stack=true" />
    <validation></validation>
  </parameter>
```