

# **GENESYS**

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# Web Real-Time Communications Deployment Guide

**Configuration Options Reference** 

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# Configuration Options Reference

The WebRTC configuration options are listed below. Click on an option name to display its properties.

#### ems

#### logconfig.MFSINK

| logconfig.MFSINK (MF S   | ink Log Filter)  |               |              |
|--|--|---------------|--------------|
| Description  | Valid values   | Default value | Takes effect |
| Controls the log<br>messages that are sent<br>to the MF sink. The<br>format is:  |  |               |              |
| "levels moduleIDs specifierIDs" (repeated if necessary).   |  |               |              |
| The values between the pipes can be in the format: "m-n,o,p" (for example, "0-4, 5, 6"). The wildcard character "*" can also be used to indicate all valid numbers. For example: "* * *" indicates that all log messages should be sent to the sink. Alternatively, "0,1 0-10 * 4 * *" indicates that CRITICAL(0) and ERROR(1) level messages with module IDs in the range 0-10 will be sent to the sink; and all INFO(4) level messages will be sent as well. | Pipe-delimited ranges<br>for log levels, module<br>IDs, and specifier IDs.<br>Ranges can be comma-<br>separated integers or<br>ranges of integers or<br>"*". | * * *         | immediately  |

## metric sconfig. MFSINK

| metricsconfig.MFSINK   | (MF Sink Metrics Filter)  |               |              |
|--|---|---------------|--------------|
| Description  | Valid values  | Default value | Takes effect |
| Specifies the metrics that are delivered to the MF Sink. "*" indicates that all metrics will be sent to the sink. Alternatively, "5-10,50-55,70,71" indicates that metrics with IDs 5, 6, 7, 8, 9, 10, 50, 51, 52, 53, 54, 55, 70, and 71 will be sent to the MF sink. | Comma-separated list of metric values or ranges. A metric value must be between 0 and 141 inclusive. The values "*" and blank are also allowed. | *             | immediately  |

# log

## all

| all (Output for level all)   |   |               |              |
|--|---|---------------|--------------|
| Description  | Valid values  | Default value | Takes effect |
| Specifies the outputs to which an application sends all log events. The log output types must be separated by a comma when more than one output level is configured. | <ul> <li>stdout — Log events are sent to the standard output (stdout).</li> <li>stderr — Log events are sent to the standard error output (stderr).</li> <li>network — Log events are sent to Message Server, which can reside anywhere on the network. Message Server stores the log events in the Log Database. Setting the all log level option to network enables an application to send log events of the standard, interaction, and trace levels to Message Server. Debug-level log events are neither sent to Message Server nor stored in the Log Database.</li> <li>memory — Log events are sent to the memory output on the local disk. This is the safest output in terms of application performance.</li> <li>[filename] — Log events are stored in a file with the specified name. If a path is not specified, the file is created in</li> </ul> | /logs/rsmplog | immediately  |

| the application's<br>working directory. |  |
|---|--|
|---|--|

## check-point

| ala a ala malant (Charalamain)  | L. Continuous IV |               |              |
|---|------------------|---------------|--------------|
| check-point (Check poin   | t intervai)      |               |              |
| Description   | Valid values     | Default value | Takes effect |
| Specifies, in hours, how often the application generates a check point log event, to divide the log into sections of equal time. By default, the application generates this log event every hour. Setting the option to 0 prevents the generation of checkpoint events. | 0 - 24           | 1             | immediately  |

# compatible-output-priority

| compatible-output-price                                  | ompatible-output-priority (Enable 6.X compatible log output priority)   |               |              |
|--|---|---------------|--------------|
| Description  | Valid values  | Default value | Takes effect |
| Specifies whether the application uses 6.x output logic. | <ul> <li>true — The log of the level specified by "Log Output Options" is sent to the specified output.</li> <li>false — The log of the level specified by "Log Output Options" and higher levels is sent to the specified output.</li> </ul> | false         | immediately  |

# debug

| debug (Output for level d   | ebug)  |               |              |
|---|--|---------------|--------------|
| Description   | Valid values   | Default value | Takes effect |
| Specifies the outputs to which an application sends the log events of the debug level and higher (that is, log events of the standard, interaction, trace, and debug levels). The log | <ul> <li>stdout — Log events are sent to the standard output (stdout).</li> <li>stderr — Log events are sent to the</li> </ul> | /logs/rsmplog | immediately  |

| output types must be separated by a comma when more than one output level is configured. | standard error output (stderr).  • memory — Log events are sent to the memory output on the local disk. This is the safest output in terms of application performance.  • network — Log events are sent to Message Server, which can reside anywhere on the network. Message Server stores the log events in the Log Database. Setting the debug log level option to network enables an application to send log events of the standard, interaction, and trace levels to Message Server. Debug-level log events are neither sent to Message Server nor stored in the Log Database.  • [filename] — Log events are stored in a file with the specified name. If a path is not specified, |  |
|--|---|--|
|  | path is not specified,<br>the file is created in<br>the application's<br>working directory.   |  |

# expire

| expire (Log Expiration)  |   |               |              |
|--|---|---------------|--------------|
| Description  | Valid values  | Default value | Takes effect |
| Determines whether log<br>files expire. If they do,<br>sets the measurement<br>for determining when<br>they expire, along with<br>the maximum number | • false — No expiration; all generated segments are stored. | 20            | immediately  |

## interaction

| interaction (Output for le   | evel interaction)  |               |              |
|--|--|---------------|--------------|
| Description  | Valid values   | Default value | Takes effect |
| Specifies the outputs to which an application sends the log events of the interaction level and higher (that is, log events of the standard and interaction levels). The log outputs must be separated by a comma when more than one output level is configured. | <ul> <li>stdout — Log events are sent to the standard output (stdout).</li> <li>stderr — Log events are sent to the standard error output (stderr).</li> <li>network — Log events are sent to Message Server, which can reside anywhere on the network. Message Server stores the log events in the Log Database. Setting the interaction log level option to network enables an application to send log events of the standard and interaction levels to Message Server.</li> <li>memory — Log events are sent to the memory output on the local disk. This is the safest output in terms of</li> </ul> | /logs/rsmplog | immediately  |

| application performance.  • [filename] — Log events are stored in a file with the specified name. If a path is not specified, the file is created in the application's working directory. |
|---|
|---|

# keep-startup-file

| keep-startup-file (Keep   | keep-startup-file (Keep startup log file)  |               |               |  |  |
|---|--|---------------|---------------|--|--|
| Description   | Valid values   | Default value | Takes effect  |  |  |
| Specifies whether a startup segment of the log, containing the initial T-Server configuration, is to be kept. If it is, this option can be set to true or to a specific size. If set to true, the size of the initial segment will be equal to the size of the regular log segment defined by the segment option. The value of this option will be ignored if segmentation is turned off (that is, if the segment option set to false). | <ul> <li>false — No startup segment of the log is kept.</li> <li>true — A startup segment of the log is kept. The size of the segment equals the value of the segment option.</li> <li>[number] KB — Sets the maximum size, in kilobytes, for a startup segment of the log.</li> <li>[number] MB — Sets the maximum size, in megabytes, for a startup segment of the log.</li> </ul> | false         | After restart |  |  |

#### memory

| memory (Memory snapshot file name)  |                             |               |              |  |
|---|-----------------------------|---------------|--------------|--|
| Description   | Valid values                | Default value | Takes effect |  |
| Specifies the name of the file to which the application regularly prints a snapshot of the memory output, if it is configured to do this. The new snapshot overwrites the | [string] (memory file name) | (blank)       | immediately  |  |

| previously written data. If the application terminates abnormally, this file will contain the latest log messages. Memory output is not recommended for processors with a CPU frequency lower than 600 MHz. |  |  |  |
|---|--|--|--|
|---|--|--|--|

# $message\_format$

| message_format (Log m  | message_format (Log messages format)  |               |              |  |  |
|--|---|---------------|--------------|--|--|
| Description  | Valid values  | Default value | Takes effect |  |  |
| Specifies the format of log record headers that an application uses when writing logs in the log file. Using compressed log record headers improves application performance and reduces the log file's size. With the value set to short:          |   |               |              |  |  |
| Headers of the log file or the log file segment contain information about the application (such as the application name, application type, host type, and time zone), whereas single log records within the file or segment omit this information. | <ul> <li>short — An application uses compressed headers when writing log records to its log file.</li> <li>full — An application uses complete headers when writing log records to its log file.</li> </ul> | short         | immediately  |  |  |
| A log message priority is abbreviated to Std, Int, Trc, or Dbg, for standard, interaction, trace, or debug messages, respectively.   | to its log file.  |               |              |  |  |
| The message ID does not contain the prefix GCTI or the application type ID. A log record in the full format looks like   |   |               |              |  |  |

this:
2002-05-07T18:11:38.196
Standard localhost
cfg\_dbserver
GCTI-00-05060
Application started
A log record in the
short format looks
like this:
2002-05-07T18:15:33.952
Std 05060
Application started

#### messagefile

| messagefile (Message file)   |                                     |               |  |  |
|--|-------------------------------------|---------------|--|--|
| Description  | Valid values                        | Default value | Takes effect   |  |
| Specifies the file name for application-specific log events. The name must be valid for the operating system on which the application is running. The option value can also contain the absolute path to the application-specific *.lms file. Otherwise, an application looks for the file in its working directory. | [string].lms (message<br>file name) | (blank)       | Immediately, if an application cannot find its *.lms file at startup |  |

#### print-attributes

| print-attributes (Enable printing extended attributes)  |   |               |              |  |
|---|---|---------------|--------------|--|
| Description   | Valid values  | Default value | Takes effect |  |
| Specifies whether the application attaches extended attributes, if any exist, to log events that it sends to log output. Typically, log events of the interaction log level and audit-related log events contain extended attributes. Setting this option to true enables audit capabilities, but negatively affects performance. Genesys recommends enabling | <ul> <li>true Attaches extended attributes, if any exist, to a log event sent to log output.</li> <li>false Does not attach extended attributes to a log event sent to log output.</li> </ul> | false         | immediately  |  |

| this option for Solution Control Server and Configuration Server when using audit tracking. For other applications, refer to Genesys Combined Log Events Help to find out whether an application generates interaction- level and audit-related log events; if it does, enable the option only when testing new interaction scenarios. |  |  |  |
|--|--|--|--|
|--|--|--|--|

# segment

| segment (Log Segmenta  | segment (Log Segmentation)  |               |                          |  |  |
|--|---|---------------|--------------------------|--|--|
| Description  | Valid values  | Default value | Takes effect             |  |  |
| Specifies whether there is a segmentation limit for a log file. If there is, sets the mode of measurement, along with the maximum size. If the current log segment exceeds the size set by this option, the file is closed and a | <ul> <li>false — No segmentation is allowed.</li> <li>[number] KB or [number] — Sets the maximum segment size, in kilobytes. The minimum segment size is 100 KB.</li> <li>[number] MB — Sets the maximum segment size, in megabytes.</li> </ul> | Default value | Takes effect immediately |  |  |
| new one is created.  | <ul> <li>[number] hr — Sets<br/>the number of hours<br/>for the segment to<br/>stay open. The<br/>minimum number is<br/>1 hour.</li> </ul>  |               |                          |  |  |

# spool

| spool (Folder for the temporary network log output files)   |  |               |              |  |
|---|--|---------------|--------------|--|
| Description   | Valid values                                     | Default value | Takes effect |  |
| Specifies the folder, including full path to it, in which an application creates temporary files related to network log | [path] (the folder, with<br>the full path to it) | (blank)       | immediately  |  |

#### standard

| standard (Output for lev   | standard (Output for level standard)   |               |              |  |  |
|--|--|---------------|--------------|--|--|
| Description  | Valid values   | Default value | Takes effect |  |  |
|  | <ul> <li>stdout — Log events are sent to the standard output (stdout).</li> <li>stderr — Log events are sent to the standard error output (stderr).</li> </ul>   |               |              |  |  |
| Specifies the outputs to which an application sends the log events of the standard level. The log output types must be separated by a comma when more than one output level is configured. | • network — Log events are sent to Message Server, which can reside anywhere on the network. Message Server stores the log events in the Log Database. Setting the standard log level option to network enables an application to send log events of the standard level to Message Server. | /logs/rsmplog | immediately  |  |  |
|  | <ul> <li>memory — Log<br/>events are sent to<br/>the memory output<br/>on the local disk.<br/>This is the safest<br/>output in terms of<br/>application<br/>performance.</li> </ul>  |               |              |  |  |
|  | • [filename] — Log events are stored in a file with the specified name. If a path is not specified, the file is created in the application's   |               |              |  |  |

|  | working directory. |  |  |
|--|--------------------|--|--|
|--|--------------------|--|--|

## time\_convert

| time_convert (Time gene  | time_convert (Time generation for log messages) |               |              |  |
|--|---|---------------|--------------|--|
| Description  | Valid values                                    | Default value | Takes effect |  |
| Specifies the system in which an application calculates the log record time when generating a log file. The time is converted from the time in seconds since the Epoch (00:00:00 UTC, January 1, 1970).  |   |               |              |  |
| <ul> <li>Local Time (local)         <ul> <li>The time of log record generation is expressed as a local time, based on the time zone and any seasonal adjustments. Time zone information from the application's host computer is used.</li> </ul> </li> </ul> | <ul><li>local</li><li>utc</li></ul>             | local         | immediately  |  |
| Coordinated     Universal Time     (utc) — The time of     log record     generation is     expressed as     Coordinated     Universal Time     (UTC).   |   |               |              |  |

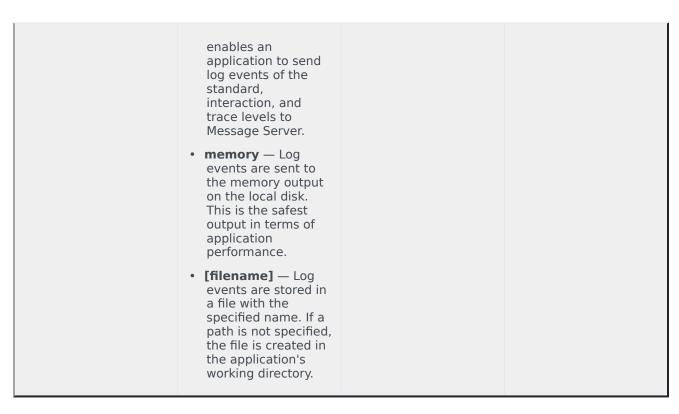
# time\_format

| time_format (Time format for log messages)  |   |               |              |  |
|---|---|---------------|--------------|--|
| Description   | Valid values  | Default value | Takes effect |  |
| Specifies how to represent, in a log file, the time when an application generates log records.  A log record's time field in the ISO 8601 format looks like | <ul><li>time</li><li>locale</li><li>ISO8601</li></ul> | time          | immediately  |  |



#### trace

| trace (Output for level trace)   |  |               |              |  |
|--|--|---------------|--------------|--|
| Description  | Valid values   | Default value | Takes effect |  |
| Specifies the outputs to which an application sends the log events of the trace level and higher (that is, log events of the standard, interaction, and trace levels). The log outputs must be separated by a comma when more than one output level is configured. | <ul> <li>stdout — Log events are sent to the standard output (stdout).</li> <li>stderr — Log events are sent to the standard error output (stderr).</li> <li>network — Log events are sent to Message Server, which can reside anywhere on the network. Message Server stores the log events in the Log Database. Setting the trace log level option to network</li> </ul> | /logs/rsmplog | immediately  |  |



#### verbose

| verbose (Verbose Level)  | verbose (Verbose Level)   |               |              |  |
|--|---|---------------|--------------|--|
| Description  | Valid values  | Default value | Takes effect |  |
| Determines whether a log output is created. If it is, specifies the minimum level of log events generated. The log events levels, starting with the highest priority level, are standard, interaction, trace, and debug. | <ul> <li>all — All log events (that is, log events of the standard, trace, interaction, and debug levels) are generated.</li> <li>debug — The same as all.</li> <li>trace — Log events of the trace level and higher (that is, log events of the standard, interaction, and trace levels) are generated, but log events of the debug level are not generated.</li> <li>interaction — Log events of the</li> </ul> | debug         | immediately  |  |

interaction level and higher (that is, log events of the standard and interaction levels) are generated, but log events of the trace and debug levels are not generated. standard — Log events of the standard level are generated, but log events of the interaction, trace, and debug levels are not generated. • **none** — No output is produced.

#### rsmp

#### allow-anonymous-user

| allow-anonymous-user (Allow Anonymous User)  |              |               |                     |  |
|--|--------------|---------------|---------------------|--|
| Description  | Valid values | Default value | Takes effect        |  |
| Set this to true (default) to enable anonymous users to sign-in to the WebRTC Gateway. If set to false, then only registered users for SIP Server can sign-in. | true, false  | true          | At start or restart |  |

#### allow-ipv6

| allow-ipv6 (Allow IPv6)                                 |              |               |                     |
|---|--------------|---------------|---------------------|
| Description   | Valid values | Default value | Takes effect        |
| Controls whether IPv6 is allowed in the WebRTC Gateway. | true, false  | false         | At start or restart |

#### codecs

| codecs (Supported and Default Media Codecs) |              |               |              |
|---|--------------|---------------|--------------|
| Description                                 | Valid values | Default value | Takes effect |

Codecs that are not A comma separated list listed here will not be of supported codecs used in an offer or (from the Description answer. The codecs column) within brackets. currently supported are: A codec's clock rate (in Hz) can optionally be • pcmu (G.711 muspecified after its name Law) followed by a '/'. • pcma (G.711 A-Law) A default payload type number can be specified using • q722 the format name=<pt>, or (g722,pcmu,pcma,opus,g729,telephone-event=126,vp8=100,h264=(pt=108,fmtp= name=(pt=<pt>). The latter • g729 (G.729/a/b) format needs to be used if an "[profile-level-At start or restart fmtp is to be specified, which • opus (nonid=42000B;packetizationwill be specified as mode=1]")) transcoding case) fmtp=<fmtp>. A comma is used as a separator between • iSAC/16000 (nonthe different values. All or part transcoding case) of the fmtp value can be enclosed within square • iSAC/32000 (nonbrackets, where those brackets will be removed transcoding case) when used in an offer, and in the case of an answer, the telephone-event brackets and the content will be replaced by the fmtp value vp8 from the remote offer. See the default value for an example. h264

#### domain-whitelist

| domain-whitelist (List o   | domain-whitelist (List of allowed domains) |               |                     |  |  |
|--|--|---------------|---------------------|--|--|
| Description  | Valid values                               | Default value | Takes effect        |  |  |
| Specifies a comma-<br>separated white-list of<br>allowed domains. A<br>wildcard character (*)<br>will be allowed in a<br>domain value for<br>specifying an arbitrary<br>scheme, sub-domain, or<br>port, as illustrated<br>below: |  |               |                     |  |  |
| *://sub.foo.com:8080—<br>URL scheme, that is,<br>either http or<br>https, is accepted.   | Any<br>See description                     | (blank)       | At start or restart |  |  |
| <ul> <li>https://*.foo.com:8090<br/>sub-domain of<br/>foo.com is<br/>accepted.</li> </ul>  | —Any                                       |               |                     |  |  |
| http://*.foo.com:*—Any<br>port number or sub-<br>domain is accepted.   | (  |               |                     |  |  |

 \*foo.com:\*—Any scheme, port, or sub-domain is accepted.

Note that if the port number is not specified, then the default HTTP port 80 is assumed.

- A check will be performed against this list only if the request contains an Origin header. Requests without an Origin header are not necessarily Cross-Origin Resource Sharing (CORS) requests. If the domain value in the Origin header matches any of the values in the whitelist, then the request will be accepted, and the Access-Control-Allow-Origin header in the response will be populated with the Origin value.
- If the value of the white-list is empty (which is the default), then CORS checking will be disabled. The Access-Control-Allow-Origin header in the response will still be set using the Origin value in the request, if there is one; otherwise, the value of this header will be set to \*.
- If the white-list contains valid values, and the Origin header doesn't exist or match any of the white-list domains,

## enable-https

| enable-https (Enable HTTPS)  |              |               |                     |
|--|--------------|---------------|---------------------|
| Description  | Valid values | Default value | Takes effect        |
| Enables HTTPS. When set to true, the other https-* parameters need to be set correctly using the host's security certificate as well. When enabled, the WebRTC Gateway supports secure HTTPS requests only. Non-secure HTTP requests will not work. Note that HTTPS is required with the latest Chrome browser by default. If an HTTPS proxy is used between the browser/client and the gateway, and it can convert the HTTPS requests to HTTP, then HTTPS does not need to be enabled here. | true, false  | false         | At start or restart |

# enable-transcoding

| enable-transcoding (Enable Transcoding)   |              |               |                     |  |
|---|--------------|---------------|---------------------|--|
| Description   | Valid values | Default value | Takes effect        |  |
| Transcoding of audio and/or video between the SIP and Web sides is enabled if this value is set to true. Otherwise, transcoding will be disabled. When enabled, transcoding will be activated for a media type, only when there is no common codec negotiated between the sides, or when a codec sent by one side is not supported by the other | true, false  | true          | At start or restart |  |

| side. |  |  |
|-------|--|--|
|-------|--|--|

#### http-port

| http-port (HTTP Port)  |              |               |                     |
|--|--------------|---------------|---------------------|
| Description  | Valid values | Default value | Takes effect        |
| The HTTP or HTTPS port used for WebRTC signaling. Port 443 is recommended for HTTPS. |              | 8086          | At start or restart |

# https-cert

| https-cert (HTTPS Certificate)  |              |               |                     |  |
|---|--------------|---------------|---------------------|--|
| Description   | Valid values | Default value | Takes effect        |  |
| For Windows, the thumbprint obtained from the user certificate generated for the host. For Linux, the fullpath of the host certificate file (.pem). |              | (blank)       | At start or restart |  |

## https-cert-key

| https-cert-key (HTTPS Certificate Key)                                       |              |               |                     |  |
|--|--------------|---------------|---------------------|--|
| Description  | Valid values | Default value | Takes effect        |  |
| Applicable for Linux only. The fullpath of the host private key file (.pem). |              | (blank)       | At start or restart |  |

# https-trusted-ca

| https-trusted-ca (HTTPS Certificate Authority)                                    |              |               |                     |
|---|--------------|---------------|---------------------|
| Description   | Valid values | Default value | Takes effect        |
| Applicable for Linux only. The fullpath of the Certificate Authority file (.pem). |              | (blank)       | At start or restart |

## http-trace

| http-trace (HTTP Trace)            |              |               |                     |
|------------------------------------|--------------|---------------|---------------------|
| Description                        | Valid values | Default value | Takes effect        |
| Traces HTTP requests and responses | true, false  | false         | At start or restart |

# reporting-service-type

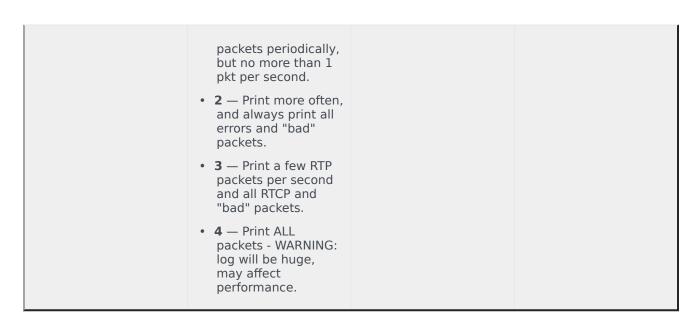
|   | (14/ L DTC D 6 | _ \           |                     |  |
|---|----------------|---------------|---------------------|--|
| reporting-service-type (WebRTC Reporting Service Type)  |                |               |                     |  |
| Description   | Valid values   | Default value | Takes effect        |  |
| SIP calls are reported out of the box when SIP Server and ICON are configured. When this parameter is set, the service_type key-value pair is sent to SIP Server and then reported to ICON. This allows the reports for the WebRTC service to be filtered based on the service type specified here. To disable the sending of a service type, set this parameter value to "none". |                | WebRTC        | At start or restart |  |

## rtp-address

| rtp-address (RTP Addres  | rtp-address (RTP Address) |               |                     |  |  |
|--|---------------------------|---------------|---------------------|--|--|
| Description  | Valid values              | Default value | Takes effect        |  |  |
| Allows for configuration of a specific IP address for SDP c= line. If not set, the stack will attempt to detect the IP address automatically. This is useful for AWS instances or multihomed hosts. For example, in an AWS instance you can set this to the elastic-IP. This setting applies to the SIP side only. |                           | (blank)       | At start or restart |  |  |

# rtp-trace-level

| rtp-trace-level (RTP Trace Level)                                       |  |               |                     |
|---|--|---------------|---------------------|
| Description   | Valid values   | Default value | Takes effect        |
| The RTP trace level controls how many packets are printed into the log. | <ul> <li>0 — Print "key"     packets only (1st     RTP/RTCP and last     RTCP) to keep log     small.</li> <li>1 — Print RTP/RTCP</li> </ul> | 1             | At start or restart |



#### sip-added-codecs

| sip-added-codecs (SIP Added Codecs)  |  |                          |                     |  |
|--|--|--------------------------|---------------------|--|
| Description  | Valid values   | Default value            | Takes effect        |  |
| When transcoding is enabled, codecs from this list will be appended to the codec list for offers to a SIP endpoint, except for the codecs that are already in the original offer. Note that all codecs in an offer from one side will be added to the resulting offer to the other side. | List of codecs using the same format as codecs option.  If not specified here, the pt and the fmtp values will be used from the list specified in the codecs option.  Note that at least one video codec should be specified, and this codec should most likely be supported by the SIP side. Otherwise, the call may fail even if transcoding is supported. For example, if the Web side offers only VP8, and the SIP side only supports H.264, sip-added-codecs will need to contain h264. Note, however, that the answer to the Web side will contain only H.264 based on the reply from the SIP side, unless web-added-codecs contains vp8. This may not be an issue for audio, given that pcmu is supported by both sides. However, if a common audio | Default value (vp8,h264) | At start or restart |  |

#### sip-address

| sip-address (SIP Address)  |              |               |                     |  |
|--|--------------|---------------|---------------------|--|
| Description  | Valid values | Default value | Takes effect        |  |
| Allows for configuration of a specific IP address for SIP Via or Contact. If not set, the stack will attempt to detect the IP address automatically. This is useful for AWS instances or multihomed hosts. For example, in an AWS instance you can set this to the elastic-IP. |              | (blank)       | At start or restart |  |

# sip-disallowed-codecs

| sip-disallowed-codecs (SIP Disallowed Codecs)   |   |               |                     |
|---|---|---------------|---------------------|
| Description   | Valid values  | Default value | Takes effect        |
| Disallowed codecs for<br>the SIP side. An offer or<br>answer to the SIP side<br>may not use any of<br>these codecs. | List of codecs using the same format as the codecs option. No need to specify "pt" or "fmpt" for a codec. | (blank)       | At start or restart |

# sip-no-avpf

| sip-no-avpf (SIP Side AVPF Negotiation)  |              |               |                     |  |
|--|--------------|---------------|---------------------|--|
| Description  | Valid values | Default value | Takes effect        |  |
| Set this to true in order not to negotiate AVPF in SDP on the SIP side (RFC 4585). This is necessary to work with SIP endpoints that do not support AVPF.  Note that regardless of the value of this option, if sip-nortcpfb = false, RTCP feedback messages will be forwarded to the SIP side. These settings are useful for a Chrome-to-Chrome call. | true, false  | true          | At start or restart |  |

#### sip-no-rtcpfb

| sip-no-rtcpfb (Forwarding RTCP Feedback Messages to SIP Side)                           |              |               |                     |  |
|---|--------------|---------------|---------------------|--|
| Description   | Valid values | Default value | Takes effect        |  |
| If set to false, RTCP feedback messages sent by a WebRTC client in accordance with (RFC | true, false  | false         | At start or restart |  |

| 4585) will be forwarded to the corresponding SIP endpoint in a call. A true value will disable this. Note that even though endpoints should ignore RTCP packets of unknown types, some may have issues with this. |  |  |  |
|---|--|--|--|
|---|--|--|--|

# sip-port

| sip-port                           |              |               |                     |  |
|------------------------------------|--------------|---------------|---------------------|--|
| Description                        | Valid values | Default value | Takes effect        |  |
| Local port used for SIP signaling. |              | 5066          | At start or restart |  |

# sip-preferred-ipversion

| sip-preferred-ipversion (Preferred IP version to be used for SIP) |   |      |                     |  |
|---|---|------|---------------------|--|
| Description Valid values Default value Takes effect               |   |      |                     |  |
| Preferred IP version to be used for SIP.                          | <ul><li>ipv4 IPv4</li><li>ipv6 IPv6</li></ul> | ipv4 | At start or restart |  |

#### sip-proxy

| sip-proxy (SIP Proxy)   |   |               |                     |
|---|---|---------------|---------------------|
| Description   | Valid values  | Default value | Takes effect        |
| The IP address(es) or the FQDN(s) of one or two (in the case of HA) SIP Server(s), separated by a comma. Optionally the port can be specified for each address, separated by a colon (:). If the default SIP port 5060 is used, it can be omitted. In all scenarios, Genesys SIP Servers are specified, and are used by the WebRTC Gateway as both SIP Proxy and Registrar. Only one address is used at a time, and the gateway switches to the other when a timeout is | It should be in the following format: <ip- address fqdn="">[:<port>][,<ip- address fqdn="">[:<port>]]</port></ip-></port></ip-> | 127.0.0.1     | At start or restart |

| detected with a SIP request. Therefore, warm failover can be achieved by specifying two SIP Servers configured in HA mode. |  |  |
|--|--|--|
|--|--|--|

## sip-proxy-srv

| sip-proxy-srv  |              |               |                     |  |
|--|--------------|---------------|---------------------|--|
| Description  | Valid values | Default value | Takes effect        |  |
| The DNS SRV address for the HA SIP Server pair (without the port number), of which the addresses are specified using the sip-proxy option. When a SIP request arrives with the SRV address, the gateway will translate it to the currently active SIP Server address and use it in its response. |              | (blank)       | At start or restart |  |

## sip-register

| sip-register (List of DNs for Registration)   |   |                                   |                     |  |
|---|---|-----------------------------------|---------------------|--|
| Description   | Valid values  | Default value                     | Takes effect        |  |
| A list of comma separated entries that specify DNs configured in the SIP Server. Any web client that registers with the gateway using an ID that matches any one of these DNs will be registered with the SIP Server by the gateway, so that it can receive calls via the SIP Server and the gateway. Therefore, a new deployment should set this parameter correctly before it can work with the SIP Server. | Each entry can be a single DN, a range of DNs specified with two hard coded values separated by a hyphen (-), or a range of DNs specified using wildcard characters (* and/or ?). A valid DN string contains only digits [0-9], '+' (as prefix), and/or the wildcard characters. Any leading zeros are preserved.  Example: 1020,2020-2050,003000,556*, | (blank)<br>100*10,123??78,+408555 | At start or restart |  |

## sip-rtp-max-port

| sip-rtp-max-port (SIP-side Max RTP Port)            |  |      |                     |
|---|--|------|---------------------|
| Description Valid values Default value Takes effect |  |      |                     |
| UDP port range for SIP-                             |  | 9999 | At start or restart |

| side RTP connection. |  |  |  |
|----------------------|--|--|--|
|----------------------|--|--|--|

#### sip-rtp-min-port

| sip-rtp-min-port (SIP-side Min RTP Port)        |              |               |                     |
|---|--------------|---------------|---------------------|
| Description                                     | Valid values | Default value | Takes effect        |
| UDP port range for SIP-<br>side RTP connection. |              | 9000          | At start or restart |

#### sip-srtp-mode

| sip-srtp-mode (SIP Side SRTP Mode)                               |  |               |                     |
|--|--|---------------|---------------------|
| Description  | Valid values   | Default value | Takes effect        |
| SRTP mode that is to be used in SDP negotiation on the SIP side. | <ul> <li>none no SRTP will be used</li> <li>optional offer two m-lines with and without SRTP (for each media), and accept either</li> <li>strict offer secure option only with SRTP; reject any non-secure offers</li> </ul> | none          | At start or restart |

#### sip-tls-cert

| sip-tls-cert (SIP TLS Certificate)   |              |               |                     |
|--|--------------|---------------|---------------------|
| Description  | Valid values | Default value | Takes effect        |
| For Windows, the thumbprint obtained from the user certificate generated for the host. For Linux, the fullpath of the host certificate file (.pem) |              | (blank)       | At start or restart |

#### sip-tls-cert-key

| sip-tls-cert-key (SIP TLS Certificate Key)                                   |              |               |                     |  |
|--|--------------|---------------|---------------------|--|
| Description  | Valid values | Default value | Takes effect        |  |
| Applicable for Linux only. The fullpath of the host private key file (.pem). |              | (blank)       | At start or restart |  |

## sip-tls-port

| sip-tls-port (SIP TLS Port)  |              |               |                     |
|--|--------------|---------------|---------------------|
| Description  | Valid values | Default value | Takes effect        |
| SIP TLS Port. To disable TLS transport for SIP traffic altogether, set to 0. |              | 0             | At start or restart |

#### sip-tls-trusted-ca

| sip-tls-trusted-ca (SIP TLS Certificate Authority)                                |              |               |                     |
|---|--------------|---------------|---------------------|
| Description   | Valid values | Default value | Takes effect        |
| Applicable for Linux only. The fullpath of the Certificate Authority file (.pem). |              | (blank)       | At start or restart |

#### stun-server

| stun-server (STUN Server)   |   |               |                     |  |
|---|---|---------------|---------------------|--|
| Description   | Valid values  | Default value | Takes effect        |  |
| Optional STUN server specification (port may be omitted, if default STUN port 3478 is used). When the gateway is in a private network with only the host's private address visible to it, a STUN server sitting outside that network may be required by the ICE processing for gathering the host's public (server reflexive) address. Only local addresses are gathered when STUN or TURN is not configured. | <ip-address fqdn>[:<port>],<br/>where port can be omitted, if<br/>default port 3478 is used.</port></ip-address fqdn> | (blank)       | At start or restart |  |

#### turn-passwd

| turn-passwd (TURN Password)                  |              |               |                     |
|--|--------------|---------------|---------------------|
| Description                                  | Valid values | Default value | Takes effect        |
| The TURN password to use for the allocation. |              | (blank)       | At start or restart |

## turn-relay-type

| turn-relay-type (TURN Relay Type) |   |  |  |  |
|-----------------------------------|---|--|--|--|
| Description                       | Description Valid values Default value Takes effect |  |  |  |

| The type of relay to use. TCP(1) and UDP(0) are supported; TLS is not supported. The default is UDP. If this parameter is not defined, but the TURN server URL contains the query string "transport=tcp", then TCP will be chosen. |  | 0 | At start or restart |
|--|--|---|---------------------|
|--|--|---|---------------------|

#### turn-server

| turn-server (TURN Server)   |   |               |                     |  |
|---|---|---------------|---------------------|--|
| Description   | Valid values  | Default value | Takes effect        |  |
| Optional TURN server specification. A TURN server is not typically required on the gateway side, but it may need to be configured on the browser/client side when there is a strict firewall between the client and the gateway that will prevent RTP/UDP traffic. Only local addresses are gathered when STUN or TURN is not configured. | <ip-address fqdn>[:<port>], where port can be omitted, if default port 3478 is used.</port></ip-address fqdn> | (blank)       | At start or restart |  |

#### turn-user

| turn-user (TURN User)                        |              |               |                     |  |
|--|--------------|---------------|---------------------|--|
| Description                                  | Valid values | Default value | Takes effect        |  |
| The TURN username to use for the allocation. |              | (blank)       | At start or restart |  |

#### use-sid-from-url

| use-sid-from-url (Use Session Id from URL)  |              |               |   |
|---|--------------|---------------|---|
| Description   | Valid values | Default value | Takes effect                            |
| When this is set to true,<br>Genesys WebRTC<br>Gateway uses HTTP<br>request URL parameters<br>or value of Cookie<br>header to match HTTP<br>request with existing<br>client session. If it is<br>false, Genesys WebRTC<br>Gateway uses value of<br>Cookie header to match | true, false  | true          | After Genesys WebRTC<br>Gateway restart |

| the HTTP request with existing client session. |  |  |
|--|--|--|
| <b>Note:</b> This option works                 |  |  |
| with Genesys WebRTC<br>Java Script API from    |  |  |
| version 8.5.210.35.                            |  |  |

#### web-added-codecs

| web-added-codecs (We   | web-added-codecs (Web Added Codecs)                              |                 |                     |  |
|--|--|-----------------|---------------------|--|
| Description  | Valid values   | Default value   | Takes effect        |  |
| When transcoding is enabled, codecs from this list will be appended to the codec list for offers to a WebRTC endpoint, except for the codecs that are already in the original offer. If G.722 is not supported on the SIP side, and yet G.722 is desired on the Web side, add "g722" to web-added-codecs for the cases where the SDP offer comes from the SIP side. Note that transcoding will take place in this case between G.722 and the audio codec used on the SIP side. The other comments for sipadded-codecs are applicable here as well. | List of codecs using the same format as sip-added-codecs option. | (g722,pcmu,vp8) | At start or restart |  |

#### web-disable-sdes

| web-disable-sdes   |              |               |                     |
|--|--------------|---------------|---------------------|
| Description  | Valid values | Default value | Takes effect        |
| When this is set to true, the crypto attribute to support SDES-SRTP (RFC 4568) will not be in initial offers to Web clients. If it is false, initial offers will have both fingerprint and crypto attributes. Note that this option does not prevent supporting SDES-SRTP when the client only offers crypto | true, false  | true          | At start or restart |

| attribute(s). However,<br>SDES-SRTP use is<br>discouraged, and only<br>Chrome supports it for |  |  |
|---|--|--|
| backward compatibility.   |  |  |

#### web-disallowed-codecs

| web-disallowed-codecs (Web Disallowed Codecs)  |   |               |                     |
|--|---|---------------|---------------------|
| Description  | Valid values  | Default value | Takes effect        |
| Disallowed codecs for<br>the WebRTC side. An<br>offer or answer to the<br>Web side may not use<br>any of these codecs. | List of codecs using the same format as sip-disallowed-codecs option. | (h264)        | At start or restart |

#### web-dtls-certificate

| web-dtls-certificate (Ce   | web-dtls-certificate (Certificate for Web-side DTLS) |                                  |                     |  |
|--|--|----------------------------------|---------------------|--|
| Description  | Valid values   | Default value                    | Takes effect        |  |
| Path of the X.509 certificate file to be used with Web-side DTLS. This file can also contain the private key for the certificate, in which case web-dtls-privatekey does not need to be set. The certificate file is mandatory for DTLS to work. The default certificate already contains the private key. |  | /config/<br>x509_certificate.pem | At start or restart |  |

## web-dtls-cipherlist

| web-dtls-cipherlist (Cipher List for DTLS)   |              |               |                     |  |
|--|--------------|---------------|---------------------|--|
| Description  | Valid values | Default value | Takes effect        |  |
| A list of cipher strings to be used with DTLS on the Web side. For information on the format, see OpenSSL ciphers. The default cipher string should work well. |              | (blank)       | At start or restart |  |

## web-dtls-keypassword

| web-dtls-keypassword (Password for DTLS Certificate Key) |   |  |  |  |
|--|---|--|--|--|
| Description  | Description Valid values Default value Takes effect |  |  |  |

| The password for the private key specified using web-dtls-privatekey, if used. | (blank) | At start or restart |
|--|---------|---------------------|
|--|---------|---------------------|

# web-dtls-privatekey

| web-dtls-privatekey (Private Key for DTLS Certificate)   |              |               |                     |  |
|--|--------------|---------------|---------------------|--|
| Description  | Valid values | Default value | Takes effect        |  |
| Path of the private key file for the certificate specified in web-dtls-certificate. This parameter is not necessary if the certificate file also contains the private key. |              | (blank)       | At start or restart |  |

#### web-enable-dtls

| web-enable-dtls (Enable DTLS on the Web-side)  |              |               |                     |
|--|--------------|---------------|---------------------|
| Description  | Valid values | Default value | Takes effect        |
| When this is set to true, DTLS-SRTP (RFC 5763) will be enabled on the Web side. When enabled, it will be signaled in an SDP offer sent by the gateway using the fingerprint attributes, though there will also be crypto attributes in SDP for SDES-SRTP (RFC 4568) support, provided that SDES-SRTP is not disabled using the option web-disable-sdes. When an offer or answer comes in with only crypto attributes, then SDES-SRTP will still be supported. When this is set to false, only SDES-SRTP will be supported. | true, false  | true          | At start or restart |

#### web-ice-addresses

| web-ice-addresses (Web ICE addresses)              |   |               |              |
|--|---|---------------|--------------|
| Description  | Valid values                                  | Default value | Takes effect |
| Allows configuration of a local IP address list to | A comma-separated list of valid IP addresses. |               | At restart   |

| be used with ICE on the web/ROAP side. Comma is the delimiter, and each IP address could be IPv4 or IPv6 (no need for square brackets). These addresses are used by ICE to gather the host candidates. |  |  |  |
|--|--|--|--|
|--|--|--|--|

#### web-media-bundle

| web-media-bundle (Media Bundle on Web-side)  |              |               |                     |  |
|--|--------------|---------------|---------------------|--|
| Description  | Valid values | Default value | Takes effect        |  |
| Set this to true to enable media bundling on the ROAP side (see http://tools.ietf.org/html/draft-ietf-mmusic-sdp-bundle-negotiation-03). When enabled, it will be signalled in an SDP offer sent by the gateway, and it will be accepted from an inbound SDP offer. If both sides agree, then the same media port will be used for both audio and video. With media bundle, it is assumed that RTCP multiplexing is also supported. Disabling this bundle option is discouraged. | true, false  | true          | At start or restart |  |

#### web-nack-enabled

| web-nack-enabled (Enable Web Side NACK Sending)  |              |               |                     |  |
|--|--------------|---------------|---------------------|--|
| Description  | Valid values | Default value | Takes effect        |  |
| Set this to true (default) to enable RTCP NACK (transport layer) feedback messages as per (RFC 4585). Set this to false to disable this feature. The minimum time between two NACK messages is currently restricted to one second. | true, false  | true          | At start or restart |  |

## web-offer-bundle-only

| web-offer-bundle-only  |              |               |                     |  |
|--|--------------|---------------|---------------------|--|
| Description  | Valid values | Default value | Takes effect        |  |
| This option helps to work around some renegotiation issues with Firefox. When an older version of Firefox without bundle support is used (version 37 and lower), set this option to false. | true, false  | true          | At start or restart |  |

## web-pli-always

| web-pli-always (Force W  | web-pli-always (Force Web Side PLI Requests) |               |                     |  |  |
|--|--|---------------|---------------------|--|--|
| Description  | Valid values                                 | Default value | Takes effect        |  |  |
| If this parameter is set to true and web-plimintime is nonzero, RTCP PLI feedback messages (RFC 4585) will be sent on a Webside video leg at every web-pli-mintime interval, regardless of transcoding or packet losses. | true, false                                  | true          | At start or restart |  |  |

## web-pli-mintime

| web-pli-mintime (Minimum Time Interval for Web Side PLI Requests)  |                                   |               |                     |
|--|-----------------------------------|---------------|---------------------|
| Description  | Valid values                      | Default value | Takes effect        |
| The minimum time period, in milliseconds, between two RTCP PLI feedback messages (RFC4585) that can be sent on a Web-side video leg. If this value is 0, PLI transmission is disabled. The actual time between two PLI messages depends on various things: if web-pli-always is true, one message will be sent every web-pli-mintime milliseconds. Otherwise, if transcoding is on, a message will be sent when the number of lost packets during web-pli-mintime exceed a | The parameter must be an integer. | 1000          | At start or restart |

specific threshold.

#### web-rtcp-mux

| web-rtcp-mux (RTCP-Mux on the Web-side)  |              |               |                     |  |
|--|--------------|---------------|---------------------|--|
| Description  | Valid values | Default value | Takes effect        |  |
| Set this to true to enable rtcp-mux on the ROAP side, as per RFC 5761. When enabled, it will be signalled in an SDP offer sent by the gateway, and it will be accepted from an inbound SDP offer. If both sides agree, then the same port will be used for both RTP and RTCP. Set this to false if rtcp-mux is not to be used. Note: If web-rtcp-mux is false, then web-media-bundle cannot be true, as it would not make sense. | true, false  | true          | At start or restart |  |

#### web-rtp-max-port

| web-rtp-max-port (ROAP-side Max RTP Port)                  |              |               |                     |  |
|--|--------------|---------------|---------------------|--|
| Description  | Valid values | Default value | Takes effect        |  |
| Maximum UDP port value for ICE (ROAP-side RTP connection). |              | 36999         | At start or restart |  |

## web-rtp-min-port

| web-rtp-min-port (ROAP-side Min RTP Port)                  |  |       |                     |  |
|--|--|-------|---------------------|--|
| Description Valid values Default value Takes effect        |  |       |                     |  |
| Minimum UDP port value for ICE (ROAP-side RTP connection). |  | 36000 | At start or restart |  |

#### snmp

SNMP settings.

#### timeout

timeout (SNMP Task Timeout)

| Description  | Valid values  | Default value | Takes effect        |
|--|---|---------------|---------------------|
| The maximum amount of time that SNMP can wait for a new task. This value is specified in milliseconds. | The parameter must be an integer value greater than zero. | 100           | At start or restart |