

GENESYS

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Deployment Guide

log Section

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all

Description: 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 is configured. For example: all =

stdout, logfile

Default Value: stdout

Valid Values (log output types):

stdout	Log events are sent to the Standard output (stdout).
stderr	Log events are sent to the Standard error output (stderr).
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 the network output 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.
memory	Log events are sent to the memory output on the local disk. This is the safest output in terms of the 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.

Changes Take Effect: After start/restart

standard

Description: 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 is configured.

For example: standard = stderr, network

Default Value: stdout

Valid Values:

stdout	Log events are sent to the Standard output (stdout).
stderr	Log events are sent to the Standard error output (stderr).
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.

memory	Log events are sent to the memory output on the local disk. This is the safest output in terms of the 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.

Changes Take Effect: Immediately

trace

Description: 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 is configured. For example: trace = stderr_network

stderr, network

Default Value: stdout

Valid Values:

stdout	Log events are sent to the Standard output (stdout).
stderr	Log events are sent to the Standard error output (stderr).
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.
memory	Log events are sent to the memory output on the local disk. This is the safest output in terms of the 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.

Changes Take Effect: Immediately

verbose

Description: 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.

Default Value: standard

Valid Values:

all	All log events (that is, log events of the Standard, Trace, Interaction, and Debug levels) are
	generated.

debug	The same as all.
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.
interaction	Log events of the 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.

Changes Take Effect: Immediately

segment

Description: 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 new one is created. This option is ignored if log output is not configured to be sent to a log file.

Default Value: 1000

Valid Values:

false	No segmentation is allowed.
<number> KB or <number></number></number>	Sets the maximum segment size, in kilobytes. The minimum segment size is 100 KB.
<number> MB</number>	Sets the maximum segment size, in megabytes.
<number> hr</number>	Sets the number of hours for the segment to stay open. The minimum number is 1 hour.

Changes Take Effect: After restart

expire

Description: Determines whether log files expire. If they do, sets the measurement for determining when they expire, along with the maximum number of files (segments) or days before the files are removed. This option is ignored if log output is not configured to be sent to a log file.

Default Value: 3 **Valid Values:**

false	No expiration; all generated segments are stored.
<number> file or <number></number></number>	Sets the maximum number of log files to store. Specify a number from 1—1000.
<number> day</number>	Sets the maximum number of days before log files are deleted. Specify a number from $1-100$.

Changes Take Effect: After restart

Warning

If an option's value is set incorrectly — out of the range of valid values — it will be automatically reset to 10.

affectedLoggers

Description: Verbosity settings are explicitly applied for the following loggers:

- Loggers that are not declared explicitly in the log4j2.xml configuration file.
- Loggers that are specified explicitly in the log4j2.xml and are specified in the value for this affectedLoggers option.

For other loggers specified in log4j2.xml, but not mentioned in the value for this option, the verbosity level is not re-applied.

Here is a use case for when you might need to set this option:

• Cassandra needs to write error messages to a log file, and at the same time, Genesys components also need to write debug messages to the log file.

To resolve this use case, you would:

- 1. Specify the following logger in log4j2.xml: <logger name="org.apache.cassandra" level="error" additivity="false">
- 2. **Do not** include org.apache.cassandra in the value for the affectedLoggers option.
- 3. The default log4j2.xml file contains the following logger: <logger name="com.genesyslab.platform" level="info" additivity="false">
- 4. Include com.genesyslab.platform in the value for the affectedLoggers option.
- 5. Set the verbose option to debug.

In the sample above, the value of affectedLoggers should be com.genesyslab.platform. Error (but no debug or info) messages from Cassandra will be available in logs, and debug messages from com.genesyslab.platform will be available in logs.

Default Value: The default value is an empty string, which means that there aren't any affected loggers.

Valid Values: Comma-separated list of logger names, specified in the LOG4J2.xml. For example: com.genesyslab.webme.commons, PROTOCOL, org.apache.cassandra

Changes Take Effect: Immediately

time format

Description: 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 this:

2001-07-24T04:58:10.123

Default Value: time

Valid Values:

time	The time string is formatted according to the HH:MM:SS.sss (hours, minutes, seconds, and milliseconds) format.
locale	The time string is formatted according to the system's locale.
IS08601	The date in the time string is formatted according to the ISO 8601 format. Fractional seconds are given in milliseconds.

Changes Take Effect: Immediately

time_convert

Description: 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 00:00:00 UTC, January 1, 1970.

Default Value: local Valid Values:

local	The time of log record generation is expressed as a local time, based on the time zone and any seasonal adjustments. Time zone information of the application's host computer is used.
utc	The time of log record generation is expressed as Coordinated Universal Time (UTC).

Changes Take Effect: Immediately