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# Genesys Pulse Deployment Guide

Application Objects Options

# Application Objects Options

The application templates for Genesys Pulse might contain other configuration options that are not described in this chapter. These options must remain set to the default values that are provided in the application templates. Changing these values might cause unexpected behavior.

You are not required to configure any options to start Genesys Pulse. Genesys Pulse supplies default values for all options that it requires to function.

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## GAX Application Object

### [link-to-pulse] Section

#### **\$default**

Default Value: No default value

Valid Values: string url

Changes Take Effect: After restart

Specifies the correct link for a Genesys Pulse menu item in the GAX navigation bar. If specified, the Genesys Pulse menu item is added to the Dashboard section of the GAX navigation bar.

Example: `http://<pulse host>:<pulse port>/<pulse context>`

## Genesys Pulse Application Object

### [general] Section

#### **client\_app\_name**

Default Value: default

Valid Values: A valid name of an application object of the Configuration Manager type .

Changes Take Effect: After restart

Specifies the name of the client application. Genesys Pulse requires a client application object to enable the access control of a browser-based interface.

#### **inactivity\_timeout**

Default Value: 600

Valid Values: any positive number

Changes Take Effect: Immediately, for users that logged into Genesys Pulse after the option's value was changed

Specifies the time, in seconds, after the latest user's activity before Genesys Pulse forces logout of this user. A negative value deactivates this timer.

**Note:** This option has no effect on users with the [Pulse View Dashboard](#) privilege.

#### **session\_timeout**

Default Value: 900

Valid Values: any number

Changes Take Effect: Immediately, for users that logged into Genesys Pulse after the option's value was changed

Specifies the time, in seconds, after the latest request from a user before Genesys Pulse closes the session. The value of this option must be greater than the value of the **inactivity\_timeout** option.

#### **confserv\_trusted**

Default Value: false  
Valid Values: true, false  
Changes Take Effect: After restart  
Enables token-based authentication with Configuration Server.

### **token\_life\_in\_minutes**

Default Value: 1440  
Valid Values: Any positive integer value  
Changes Take Effect: Immediately  
Specifies the life of the password token used in token-based authentication. Genesys recommends that you use the default value, unless you have a specific reason to override it.

## [link-to-gax] Section

### **\$default**

Default Value: No default value  
Valid Values: string url  
Changes Take Effect: After restart  
Specifies the correct link for a GAX menu item in the Genesys Pulse navigation bar. If not specified, the GAX menu item in the navigation bar leads to the same Genesys Pulse instance.  
Example: `http://<gax host>:<gax port>/<gax context>`

## [log] Section

Most of the Genesys Pulse log options are inherited from the [Common Log Options](#) section of the *Framework Configuration Options Reference Manual*. For more information about logging, see [Log4j2 Configuration with the Application Template Application Block](#) in the *Platform SDK Developer's Guide*.

### **all**

Default Value: No default value  
Valid Values:

- `stdout`—Log events are sent to the Standard output (stdout).
- `stderr`—Log events are sent to the Standard error output (stderr).
- `memory`—Log events are sent to the memory output on the local disk. This output is the safest in terms of the application performance.
- `network`—Log events are sent to Message Server, which can reside anywhere on the network. Message Server stores log events in the Log Database.

Setting the all log-level option to network enables Data Sourcer to send log events of Standard, Interaction, and Trace levels to Message Server. Log events of Debug level 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 you do not specify a path, the file is created in the application's working directory.

Changes Take Effect: Immediately  
Specifies the outputs to which an application sends all log events. You must separate log-output

types with commas when you configure more than one output type.  
For example, all = stdout, logfile

**Notes:**

- To ease the troubleshooting process, consider using unique names for log files that different applications generate.
- Relative file paths must begin with ./

**buffering**

Default Value: false

Valid Values: true, false

Changes Take Effect: Immediately

Specifies whether the operating system file buffering is on or off. This option applies only to stderr and stdout output. Setting this option to true increases output performance.

**Note:** When you enable buffering, log messages might appear in the log after a delay.

**custom-message-format**

Default Value: [%-11.11thread] %-20.20logger{1} <%X{requestId}> %m %exception{full}%n

Valid Values: Log4j or Log4j2 pattern formats

Changes Take Effect: Immediately

When the **message-format** option is set to custom, the value of the **custom-message-format** option is used to format the log message pattern. The **custom-message-format** option provides the LMS-style log level and the predefined messages prefix containing timestamp per the **time-format/time-convert** option settings.

**debug**

Default Value: No default value

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).
- memory—Log events are sent to the memory output on the local disk. This output is the safest in terms of the application performance.
- network—Log events are sent to Message Server, which can reside anywhere on the network. Message Server stores log events in the Log Database.
- [filename]—Log events are stored in a file with the specified name. If you do not specify a path, the file is created in the application's working directory.

Changes Take Effect: Immediately

Specifies the outputs to which the log events of the Debug level and higher (that is, log events of the Standard, Interaction, Trace, and Debug levels) are sent. The log output types must be separated by a comma when more than one output is configured.

For example, debug= stdout, logfile

**enable\_audit\_trail**

Default Value: false

Valid Values: false, true

Changes Take Effect: After restart

Specifies whether audit trail records are added to the log file. When this option is enabled, the log captures user operations with Dashboards, Wallboards, Widgets and Widget Templates. User operations are logged with the [AUDIT] marker.

### **expire**

Default Value: 10

Valid Values:

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

Changes Take Effect: Immediately

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.

### **interaction**

Default Value: No default value

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).
- memory—Log events are sent to the memory output on the local disk. This output is the safest in terms of the application performance.
- network—Log events are sent to Message Server, which can reside anywhere on the network. Message Server stores log events in the Log Database.
- [filename]—Log events are stored in a file with the specified name. If you do not specify a path, the file is created in the application's working directory.

Changes Take Effect: Immediately

Specifies the outputs to which the log events of the Interaction level and higher (that is, log events of the Standard and Interaction levels) are sent. The log outputs must be separated by a comma when more than one output is configured.

For example, interaction= stdout, logfile

### **message-format**

Default Value: medium

Valid Values:

- short—An application uses compressed headers when writing log records into its log file.
- medium—An application uses medium size headers when writing log records into its log file.
- full—An application uses complete headers when writing log records into its log file.
- shortcsv—An application uses compressed headers with comma delimiter when writing log records into

its log file.

- **shorttsv**—An application uses compressed headers with tab char delimiter when writing log records into its log file.
- **shortdsv**—An application uses compressed headers with delimiter, which is specified by the value of the **message-header-delimiter** option.
- **custom**—An application uses custom log messages format, which is specified by the value of the **output-pattern** or the **custom-message-format** option.

**Changes Take Effect:** Immediately

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 size. With the value set to **short**:

- A header of the log file or the log file segment contains 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.
- A log message priority is abbreviated to Std, Int, Trc, or Dbg, for Standard, Interaction, Trace, or Debug messages, respectively.
- The message ID does not contain the prefix GCTI or the application type ID.

### **message-header-delimiter**

**Default Value:** |

**Valid Values:** String

**Changes Take Effect:** Immediately

When the **message-format** option is set to **shortdsv**, the value of the **message-header-delimiter** option is used as the log message delimiter.

### **output-pattern**

**Default Value:** %d{dd.MM.yyyy HH:mm:ss}| %-5.5p | %-45.80t | %-30.1000c{1} %m %ex%n

**Valid Values:** Log4j or Log4j2 pattern formats

**Changes Take Effect:** Immediately

When the **message-format** option is set to **custom**, the value of the **output-pattern** option is used as the log message pattern.

### **segment**

**Default Value:** 100 MB

**Valid Values:**

- **false**—No segmentation allowed.
- **<number> KB** or **<number>**—Sets the maximum segment size in kilobytes. The minimum segment size is 100 KB.
- **<number> MB**—Sets the maximum segment size, in megabytes.
- **<number> hr**—Sets the number of hours for which the segment stays open. The minimum number is 1 hour.

**Changes Take Effect:** Immediately

Specifies if there is a segmentation limit for a log file. If there is, this option sets the unit of

measurement along with the maximum size. If the current log segment exceeds the size set by this option, the current file is closed and a new file is created. This option is ignored if the log output is not configured to be sent to a log file.

### **standard**

Default Value: No default value

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`).
- `memory`—Log events are sent to the memory output on the local disk. This output is the safest in terms of the application performance.
- `network`—Log events are sent to Message Server, which can reside anywhere on the network. Message Server stores log events in the Log Database.
- `[filename]`—Log events are stored in a file with the specified name. If you do not specify a path, the file is created in the application's working directory.

Changes Take Effect: Immediately

Specifies the outputs to which the log events of the Standard level are sent. The log output types must be separated by a comma when more than one output is configured.

For example, `standard = stdout, logfile`

### **time-convert**

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 the log record generation is expressed as Coordinated Universal Time (UTC).

Changes Take Effect: Immediately

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.

### **time-format**

Default Value: `time`

Valid Values:

- `iso8601`—The date in the time string is formatted according to the ISO 8601 format. Fractional seconds are given in milliseconds.
- `locale`—The time string is formatted according to the system's locale.
- `time`—The time string is formatted according to "HH:MM:SS.sss" (hours, minutes, seconds, and milliseconds) format.

Changes Take Effect: Immediately

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`.

### **trace**

Default Value: No default value

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`).
- `memory`—Log events are sent to the memory output on the local disk. This output is the safest in terms of the application performance.
- `network`—Log events are sent to Message Server, which can reside anywhere on the network. Message Server stores 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.
- `[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

Specifies the outputs to which the log events of the Trace level and higher (that is, log events of the Standard, Interaction, and Trace levels) are sent. The log output types must be separated by a comma when more than one output is configured.

For example, `trace = stdout, logfile`

### **verbose**

Default Value: all

Valid Values:

- `all`—All log events (that is, log events of Standard, Trace, Interaction, and Debug levels) are generated if you set the debug-level option in the `statsserver` section to `all`.
- `debug`—The same as `all`.
- `trace`—Log events of the Trace and higher levels (that is, log events of Standard, Interaction, and Trace levels) are generated, while log events of the Debug level are not generated.
- `interaction`—Log events of the Interaction and higher levels (that is, log events of Standard and Interaction levels) are generated, while log events of the Trace and Debug levels are not generated.
- `standard`—Log events of the Standard level are generated, while log events of the Interaction, Trace, and Debug levels are not generated.
- `none`—Produces no output.

Changes Take Effect: Immediately

Determines whether a log output is created. If it is, this option specifies the minimum level of log events that are generated. The log-event levels, starting with the highest-priority level, are Standard, Interaction, Trace, and Debug.

Refer to the [Framework Management Layer User's Guide](#) for more information on the Standard, Interaction, Trace, and Debug log levels.

## [oauth] Section

### **access\_token\_url**

Default Value: No default value

Changes Take Effect: After restart

Specifies the Auth server endpoint for retrieval of the access token. For example, <http://gws-usw1.genhtcc.com/auth/v3/oauth/token>.

### **client\_id**

Default Value: No default value

Changes Take Effect: After restart

Specifies the OAuth2 client ID. For example, `pulse_client`.

### **password**

Default Value: No default value

Changes Take Effect: After restart

Specifies the OAuth2 client secret. For example, `45hegfsyr34rgiuwefhiua`.

### **user\_logout\_url**

Default Value: No default value

Changes Take Effect: After restart

Specifies the Auth server endpoint for logout. For example, <http://gws-usw1.genhtcc.com/auth/v3/sign-out>.

### **user\_auth\_url**

Default Value: No default value

Changes Take Effect: After restart

Specifies the Auth server endpoint for user authorization. For example, <http://gws-usw1.genhtcc.com/auth/v3/oauth/authorize>.

### **user\_info\_url**

Default Value: No default value

Changes Take Effect: After restart

Specifies the Auth server endpoint for retrieval of the user info. For example, <http://gws-usw1.genhtcc.com/auth/v3/userinfo>.

### **user\_logout\_redirect\_url**

Default Value: No default value

Changes Take Effect: After restart

Specifies the custom url for redirecting the user after logout. By default the user will be redirected back to Pulse.

### **user\_logout\_global**

Default Value: false

Valid Values: true, false

Changes Take Effect: After restart

Enables invalidation for all SSO user sessions on logout.

### **force\_https\_for\_redirect**

Default Value: false

Valid Values: true, false

Changes Take Effect: After restart

This option must be set to true when Pulse is running behind an HTTPS termination proxy.

## [pulse] Section

### **alert\_refresh\_interval**

Default Value: 3

Valid Values: any positive number

Changes Take Effect: After the browser page refresh

Specifies, in seconds, the data refresh interval of the Alert Widget.

### **alert\_snooze\_timeout**

Default Value: 900

Valid Values: any positive number

Changes Take Effect: After the browser page refresh

Specifies, in seconds, the snooze alert duration on the Alert Widget.

### **cache\_expire\_timeout**

Default Value: 1200

Valid Values: zero or any positive number

Changes Take Effect: After restart

Specifies how long, in seconds, that Genesys Pulse stores the results of the object accessibility check in order to reduce the load on the Configuration Server.

### **database\_delay\_on\_retry**

Default Value: 5

Valid Values: any number, `database_retry_duration / database_delay_on_retry` must be  $\geq 1$

Changes Take Effect: After restart

Introduced: 9.0.008.02

Specifies how long, in seconds, Pulse waits between retries of a failing RDBMS operation.

### **database\_max\_active\_connections**

Default Value: 8

Valid Values: any positive number

Changes Take Effect: After restart

Specifies the database connection pool size, which limits the maximum number of connections to the Genesys Pulse database. If you see large unexpected delays when you update dashboard or widgets, check the number of active database connections, and, if above the maximum, increase this parameter to improve performance.

### Important

To ensure the proper Genesys Pulse behavior, Genesys recommends to set the value of the **database\_max\_active\_connections** option to 8 or higher number.

### **database\_max\_wait\_timeout**

Default Value: 10

Valid Values: any positive number

Changes Take Effect: After restart

Introduced: 9.0.006.03

The amount of time, in seconds, to wait for a connection. Applicable only to PostgreSQL and Microsoft SQL.

**database\_query\_timeout**

Default Value: 300

Valid Values: any positive number

Changes Take Effect: After restart

Introduced: 9.0.006.03

The amount of time, in seconds, to wait for a query to the database to finish.

**database\_retry\_duration**

Default Value: 300

Valid Values: any number, database\_retry\_duration / database\_delay\_on\_retry must be  $\geq 1$

Changes Take Effect: After restart

Introduced: 9.0.008.02

Specifies how long, in seconds, Pulse attempts to retry a failing RDBMS operation.

**database\_validation\_query\_timeout**

Default Value: 10

Valid Values: any positive number

Changes Take Effect: After restart

Introduced: 9.0.006.03

The amount of time, in seconds, to wait for a query to the database to finish when checking a connection.

**disable\_cfg\_xpath\_query**

Default Value: false

Valid Values: true, false

Changes Take Effect: After restart

Introduced: 9.0.007.13

Allow more efficient handling of requests to Config Server when checking user permissions. Enable this option to reduce the load on Config Server. The option works with Config Server versions 8.5.101.21 or higher.

**editable\_templates**

Default Value: false

Valid Values: true, false

Changes Take Effect: After restart

Enables users with appropriate permissions to edit Genesys-provided templates. If false, even an Administrator cannot edit the default templates. Use this option to remove obsolete or unused templates (for example, iWD or Email). Use in conjunction with the install\_templates option.

**enable\_advanced\_alerts**

Default Value: false

Valid Values: true, false

Changes Take Effect: After the browser page refresh

Enables the ability to configure Advanced Alerts in the user interface.

## Important

This option must be enabled only when Genesys Pulse configuration meets requirements of [microservices](#).

### **enable\_manual\_collector\_binding**

Default Value: false

Valid Values: true, false

Changes Take Effect: After restart, also requires the refresh of your browser page

Enables the ability to manually specify which Genesys Pulse Collector is used to calculate the statistics of a predefined templates or certain widgets. Users should have the [Pulse Manually Bind Collectors](#) role assigned in configuration in order to used this ability.

### **enable\_push\_changes**

Default Value: false

Valid Values: true, false

Changes Take Effect: After restart

Introduced: 9.0.008.02

Enables the ability to open Published dashboards or wallboards in new shared mode when all changes made and published by owner are reflected on the dashboard or wallboard automatically.

### **folder\_based\_access**

Default Value: false

Valid Values: true, false

Changes Take Effect: After restart

When this option is enabled, Genesys Pulse does not create Script objects for Widget Templates, Dashboards, and Wallboards when saving them to Configuration Server. Instead, the association with a target directory is stored by Genesys Pulse and Permissions in GAX must be set for the target folder rather than for an individual Script object.

### **health\_expire\_timeout**

Default Value: 30

Valid Values: 1-300

Changes Take Effect: After restart

Specifies how long, in seconds, Genesys Pulse stores result of previous health check, which includes the heartbeat, DB connection, and Configuration Server connection.

### **install\_templates**

Default Value: true

Valid Values: true, false

Changes Take Effect: After restart

Used in conjunction with the `editable_templates` option, specifies whether Genesys Pulse installs or updates the Genesys-provided templates for the current release when Genesys Pulse starts. In most cases, when `editable_templates` is true this option should be set to false.

For example, if you set `editable_templates` option to true, delete or edit some templates and the `install_templates` option is set to true, then Genesys Pulse restores all original Genesys-provided

templates after restart for the current release. Genesys Pulse restores only templates from the current release, not earlier releases, which may be obsolete.

### **max\_tabs\_per\_user**

Default Value: 0

Valid Values: zero or any positive number

Changes Take Effect: After restart

Specifies the maximum number of personal dashboards. A 0 value means users can have unlimited dashboards.

### **max\_widgets\_per\_user**

Default Value: 0

Valid Values: zero or any positive number

Changes Take Effect: After restart

Specifies the maximum number of widgets for all dashboards. This value is the total sum of widgets for each user. A 0 value means users can have unlimited widgets.

### **nav\_bar\_items**

Default Value: No default value

Valid Values: specially formed JSON string

Changes Take Effect: After the browser page refresh

Allows to embed custom links to any third-party website in the Navigation bar.

For example, to setup the Advisors menu in Genesys Pulse you need to specify the value as a single string:

```
{"id": "nav_adv", "name": "Advisors", "type": "main-item", "children": [{"id": "nav_adv_cca", "name": "Contact Center Advisor", "type": "sub-item", "route": "http://<host>/adv/"}, {"id": "nav_adv_wfa", "name": "Workforce Advisor", "type": "sub-item", "route": "http://<host>/adv/"}, {"id": "nav_adv_fa", "name": "Frontline Advisor", "type": "sub-item", "route": "http://<host>/adv/"}]}
```

where the route property is set according to the Advisors access URL in your environment.

### **site**

Default Value: No default value

Valid Values: any string

Changes Take Effect: After restart

Specifies the site name where Genesys Pulse is installed. If specified, Genesys Pulse reads snapshot data only from the connected Genesys Pulse Collectors with the same site option specified in the [collector] section.

### **snapshot\_expire\_timeout**

Default Value: 24

Valid Values: zero or any positive number

Changes Take Effect: After restart

Specifies how long, in hours, that the snapshot file remains before Genesys Pulse automatically removes it. This setting should be no more than 24 hours, unless you plan to provide enough disk space to store additional snapshots. Set it to 0 to disable automatic removal.

## [security] Section

### **auth\_type**

Default Value: No default value

Valid Value: oauth

Changes Take Effect: After restart

Enables oauth2 authorization via GWS.

## Genesys Pulse Collector Application Object

### [collector] Section

#### **dbthread**

Default value: no

Valid values: yes, no

Change takes effect: After restart

Enables or disables running of embedded DB Server in Genesys Pulse Collector internal thread.

#### **hostname**

Default Value: Empty value

Valid Values: Valid host name

Changes Take Effect: After restart

Specifies the Simple Network Management Protocol (SNMP) host name.

#### **management-port**

Default Value: No default value

Valid Values: Positive integers

**Warning!** No other application should use this port.

Changes Take Effect: After restart

Specifies the TCP/IP port that Genesys Pulse Collector reserves for SNMP Option Management Client connections. If this option is absent or null, a server for Management Client is not created.

**Warning!** You must specify a value for this option if you are using an SNMP connection. Do not change the value for this option while Genesys Pulse Collector is running.

#### **site**

Default Value: No default value

Valid Values: any string

Changes Take Effect: After Genesys Pulse restart

Specifies the site name where Genesys Pulse Collector is installed. If specified, only the Genesys Pulse with the same site option specified in the [pulse] section reads the snapshot data from this Genesys Pulse Collector.

## [configuration-monitoring] Section

### **always-get-vag-members-from-statserver**

Default Value: no

Valid Values: yes, no

Changes Take Effect: After restart

Introduced: Genesys Pulse Collector 9.0.006.04

Enables or disables the ability to get members of Virtual Agent Groups (VAGs), for both Stat Server and Configuration Server (skill-only), from Stat Server.

### **check-layout-presence-timeout**

Default Value: 900

Valid Values: 0-3600

Changes Take Effect: After restart

Specifies how often, in seconds, Genesys Pulse Collector checks for the deleted layouts. A zero (0) value completely disables the check.

**Note:** This defines the minimum timeout between two checks. The actual timeout depends on the database polling cycle, because the check is conducted after finishing subsequent database polling cycle.

### **db-poll-period**

Default Value: 30

Valid Values: 3-3600

Changes Take Effect: After restart

Specifies how often, in seconds, Genesys Pulse Collector obtains updates from the Genesys Pulse database.

**Note:** Genesys recommends that you set this option to no less than 15 seconds.

### **excluded-objects-propagation-delay**

Default value: 60

Valid Values: 0...3600

Changes Take Effect: Immediately

Specifies the delay in seconds before Genesys Pulse Collector attempts to propagate excluded objects in the affected layouts after an object is deleted. A zero value eliminates the timeout and Genesys Pulse Collector attempts to propagate excluded objects immediately after an object is deleted.

### **metagroup-contents-recheck-delay**

Default Value: 60

Valid Values: 0...3600

Changes Take Effect: Immediately

Specifies the delay in seconds between when Genesys Pulse Collector verifies metagroup contents (such as Agent Group, Place Group, and DN Group) after notification from Configuration Server notifies Genesys Pulse Collector about changes in the contents of the metagroup object. Zero value of this option eliminates timeout and metagroup change is processed immediately.

**Note:** This configuration option impacts ANY changes in the metagroup (for example, both adding and deleting objects), so new objects added to the metagroup appear in the layout after the specified delay.

### **new-object-delay**

Default Value: 0

Valid Values: 0-86400

Changes Take Effect: Immediately

Specifies the delay, in seconds, between when Genesys Pulse Collector receives notification of a new object in Configuration Server, and when it starts to process this notification. Setting this option to 0 enables Genesys Pulse Collector to process new objects without delays.

### **ods-wait-timeout**

Default Value: 300

Valid Values: 10-3600

Changes Take Effect: After restart

Specifies the time, in seconds, that Genesys Pulse Collector waits before re-checking the Genesys Pulse database for proper initialization.

### **remove-dynamic-object-delay**

Default Value: 60

Valid Values: 0-600

Changes Take Effect: After restart

Specifies the time, in seconds, that Genesys Pulse Collector waits before excluding and closing statistics for the Agent from affected layout that was excluded from the Stat Server-based VAG. A zero value turns off the delay and Genesys Pulse Collector processes changes immediately.

## [heartbeat] Section

### Important

- Genesys Pulse uses the **output-folder**, **heartbeat-folder**, and **latest-snapshot-output-folder** options when it is configured on the same host as Genesys Pulse Collector or if there is no corresponding external option configured.
- Genesys Pulse uses the **external-\*-folder** options (if configured) when it is configured on a different host from Genesys Pulse Collector and the **external-output-folder** option is specified.
- Genesys Pulse uses the **external-\*-url** folder when it is configured on a different host from Genesys Pulse Collector and no **external-output-folder** option is specified.
- Starting with release 9.0.000, the heartbeat file is always updated, therefore the **heartbeat/heartbeat-success-condition** option is discontinued. New command line option **-startup\_heartbeat\_file** that specifies which heartbeat file to use before Genesys Pulse Collector can read regular heartbeat configuration options from its Application. This option has only one parameter that provides a path to the heartbeat file.

### **external-heartbeat-folder**

Default Value: No default value

Valid Values: Network or locally mounted path to the heartbeat-folder accessible from a remote Genesys Pulse instance.

Changes Take Effect: After restart

Enables a remote Genesys Pulse instance to access the Genesys Pulse Collector heartbeat. This option must be used together with the heartbeat-folder.

**Note:** Relative file paths must begin with ./

Deprecated since release 9.0.000, configure [Genesys Pulse with WebDAV](#) instead.

### **external-heartbeat-url**

Default Value: No default value

Valid Values: valid HTTP URL to a heartbeat's folder on WebDAV server. For example, `http://host1:8080/heartbeat`

Changes Take Effect: After restart

Description: Enables a remote Genesys Pulse instance to access heartbeat through WebDAV server. This option must be used together with the heartbeat-folder. The value of this option is ignored by Genesys Pulse in case when Genesys Pulse Collector and Genesys Pulse are configured on the same Host or external-output-folder option is specified.

### **heartbeat-folder**

Default Value: ./output/heartbeat (as provided by template file)

Valid Values: Valid folder path

Changes Take Effect: After restart

Specifies the path in which Genesys Pulse Collector writes the heartbeat file.

**Note:** Relative file paths must begin with ./

### **heartbeat-period**

Default Value: 120

Valid Values: 3-3600

Changes Take Effect: After restart

Specifies the period of a heartbeat update, in seconds.

### **heartbeat-success-condition**

Default Value: statsserver, snapshot-writer

Valid Values:

One or any combination of the following conditions:

- statsserver—Stat Server connection should be available.
- snapshot-writer—The snapshot writer should be producing outputs without error.
- db-poller—The polling of Genesys Pulse database should not fail.
- collector-db—The connection to Genesys Pulse database should be established.

Changes Take Effect: After restart

**Discontinued:** as of 9.0.000

Specifies a comma-separated list of conditions to be checked for criteria of heartbeat success, which means the heartbeat is updated only if this criteria is met.

## [layout-validation] Section

### **enable-layout-validation**

Default Value: yes

Valid Values: yes, no

Changes Take Effect: After restart

Enables or disables layout validation in Genesys Pulse Collector.

When this option is set to no, Genesys Pulse Collector ignores fatal layout definition errors and collects data to the possible extent. Messages of the Warning or Error levels are still being written to the snapshot.

## [limits] Section

### **max-formulas-per-layout**

Default Value: 50

Valid Values: 1-100000

Changes Take Effect: After restart

Specifies the maximum number of formula-based statistics for each layout.

### **max-metagroups-per-layout**

Default Value: 50

Valid Values: 1-10000

Changes Take Effect: After restart

Specifies the maximum number of metagroups for each layout.

### **max-objects-per-layout**

Default Value: 100

Valid Values: 1-100000

Changes Take Effect: After restart

Specifies the maximum number of objects for each layout.

### **max-statistics-per-layout**

Default Value: 100

Valid Values: 1-100000

Changes Take Effect: After restart

Specifies the maximum number of statistics for each layout.

### **Important**

Genesys Pulse adds three or more auxiliary statistics to each layout. Make sure to adjust your value accordingly.

## [log] Section

Most of the Genesys Pulse Collector log options are inherited from the [Common Log Options](#) section of the *Framework Configuration Options Reference Manual*.

### **all**

Default Value: No default value

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 log events in the Log Database.

Setting the `all` log-level option to `network` enables Data Sourcer to send log events of Standard, Interaction, and Trace levels to Message Server. Log events of Debug level 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 output is the safest in terms of the application performance.
- `[filename]`—Log events are stored in a file with the specified name. If you do not specify a path, the file is created in the application's working directory.

Changes Take Effect: Immediately

Specifies the outputs to which an application sends all log events. You must separate log-output types with commas when you configure more than one output type.

For example, `all = stdout, logfile`

### **Notes:**

- To ease the troubleshooting process, consider using unique names for log files that different applications generate.
- Relative file paths must begin with `./`

### **buffering**

Default Value: `false`

Valid Values: `true`, `false`

Changes Take Effect: Immediately

Specifies whether the operating system file buffering is on or off. This option applies only to `stderr` and `stdout` output. Setting this option to `true` increases output performance.

**Note:** When you enable buffering, log messages might appear in the log after a delay.

### **collector-log-level**

Default Value: `Info`

Valid Values: `Debug`, `Trace`, `Info`, `Warning`, `Error`, `Fatal` (case insensitive)

Changes Take Effect: Immediately

Defines log level for Genesys Pulse Collector log messages. Messages with severity below this level will not be logged.

Message severity levels:

- `Debug`—detailed debug messages.
- `Trace`—detailed informational and progress messages.

- Info—brief informational and progress messages.
- Warning—minor recoverable errors or situations.
- Error—severe, but recoverable errors.
- Fatal—severe, unrecoverable errors.

**Note:** This option was introduced in Genesys Pulse Collector release 8.5.106. Log output of earlier Genesys Pulse Collector releases corresponds to the current Trace log level. For release 8.5.106 or later, the **[log]/verbose** option must be set to all in order to see log messages configured in the **collector-log-level** option.

### **expire**

Default Value: false

Valid Values:

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

Changes Take Effect: Immediately

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.

### **segment**

Default Value: 10 MB

Valid Values:

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

Changes Take Effect: Immediately

Specifies if there is a segmentation limit for a log file. If there is, this option sets the unit of measurement along with the maximum size. If the current log segment exceeds the size set by this option, the current file is closed and a new file is created.

### **verbose**

Default Value: all

Valid Values:

- all—All log events (that is, log events of Standard, Trace, Interaction, and Debug levels) are generated if you set the debug-level option in the statsserver section to all.

- debug—The same as all.
- trace—Log events of the Trace and higher levels (that is, log events of Standard, Interaction, and Trace levels) are generated, while log events of the Debug level are not generated.
- interaction—Log events of the Interaction and higher levels (that is, log events of Standard and Interaction levels) are generated, while log events of the Trace and Debug levels are not generated.
- standard—Log events of the Standard level are generated, while log events of the Interaction, Trace, and Debug levels are not generated.
- none—Produces no output.

### Changes Take Effect: Immediately

Determines whether a log output is created. If it is, this option specifies the minimum level of log events that are generated. The log-event levels, starting with the highest-priority level, are Standard, Interaction, Trace, and Debug.

Refer to the *Framework Management Layer User's Guide* for more information on the Standard, Trace, Interaction, and Debug log levels.

## [object-name-format] Section

You can use a custom format for an object name, which can include a mix of predefined text and additions to the object properties within their actual values with optional width and trimming rules. For details, see “Valid object name format string” and “Object Information”.

### **AccessResource**

Default Value: %ObjectName%

Valid Values: Valid object name format string. For details, see the table at the bottom of this section.

Changes Take Effect: After restart

Specifies the object name formatting rule for an object of type DN with subtype Access Resource. For details, see “Object Properties” at the bottom of this section.

### **ACDPosition**

Default Value: %ObjectName%

Valid Values: Valid object name format string. For details, see the table at the bottom of this section.

Changes Take Effect: After restart

Specifies the object name formatting rule for an object of type DN with subtype ACD Position. For details, see “Object Properties” at the bottom of this section.

### **ACDQueue**

Default Value: %ObjectName%

Valid Values: Valid object name format string. For details, see the table at the bottom of this section.

Changes Take Effect: After restart

Specifies the object name formatting rule for the object of the of type DN with subtype ACD Queue. For details, see “Object Properties” at the bottom of this section.

### **Agent**

Default Value: %ObjectName%

Valid Values: Valid object name format string. For details, see the table at the bottom of this section.

Changes Take Effect: After restart

Specifies the object name formatting rule for the object of the of type Agent. For details, see “Object Properties” at the bottom of this section.

### **AgentGroup**

Default Value: %ObjectName%

Valid Values: Valid object name format string. For details, see the table at the bottom of this section.

Changes Take Effect: After restart

Specifies the object name formatting rule for the object of the of type Agent Group. For details, see “Object Properties” at the bottom of this section.

### **CallingList**

Default Value: %ObjectName%

Valid Values: Valid object name format string. For details, see the table at the bottom of this section.

Changes Take Effect: After restart

Specifies the object name formatting rule for an object of type Calling List. For details, see “Object Properties” at the bottom of this section.

### **Campaign**

Default Value: %ObjectName%

Valid Values: Valid object name format string. For details, see the table at the bottom of this section.

Changes Take Effect: After restart

Specifies the object name formatting rule for an object of type Campaign. For details, see “Object Properties” at the bottom of this section.

### **CampaignCallingList**

Default Value: %ObjectName%

Valid Values: Valid object name format string. For details, see the table at the bottom of this section.

Changes Take Effect: After restart

Specifies the object name formatting rule for an object of type Campaign Calling List. For details, see “Object Properties” at the bottom of this section.

### **CampaignGroup**

Default Value: %ObjectName%

Valid Values: Valid object name format string. For details, see the table at the bottom of this section.

Changes Take Effect: After restart

Specifies the object name formatting rule for an object of type Campaign Group. For details, see “Object Properties” at the bottom of this section.

### **Cellular**

Default Value: %ObjectName%

Valid Values: Valid object name format string. For details, see the table at the bottom of this section.

Changes Take Effect: After restart

Specifies the object name formatting rule for an object of type DN with subtype Cellular. For details, see “Object Properties” at the bottom of this section.

### **Chat**

Default Value: %ObjectName%

Valid Values: Valid object name format string. For details, see the table at the bottom of this section.

Changes Take Effect: After restart

Specifies the object name formatting rule for an object of type DN with subtype Chat. For details, see “Object Properties” at the bottom of this section.

### **CoBrowse**

Default Value: %ObjectName%

Valid Values: Valid object name format string. For details, see the table at the bottom of this section.

Changes Take Effect: After restart

Specifies the object name formatting rule for an object of type DN with subtype CoBrowse. For details, see “Object Properties” at the bottom of this section.

### **CP**

Default Value: %ObjectName%

Valid Values: Valid object name format string. For details, see the table at the bottom of this section.

Changes Take Effect: After restart

Specifies the object name formatting rule for an object of type DN with subtype CP. For details, see “Object Properties” at the bottom of this section.

### **Data**

Default Value: %ObjectName%

Valid Values: Valid object name format string. For details, see the table at the bottom of this section.

Changes Take Effect: After restart

Specifies the object name formatting rule for an object of type DN with subtype Data. For details, see “Object Properties” at the bottom of this section.

### **DN**

Default Value: %ObjectName%

Valid Values: Valid object name format string. For details, see the table at the bottom of this section.

Changes Take Effect: After restart

Specifies the object name formatting rule for an object of type DN. For details, see “Object Properties” at the bottom of this section.

### **DNGroup**

Default Value: %ObjectName%

Valid Values: Valid object name format string. For details, see the table at the bottom of this section.

Changes Take Effect: After restart

Specifies the object name formatting rule for an object of type DN Group. For details, see “Object Properties” at the bottom of this section.

### **EAPort**

Default Value: %ObjectName%

Valid Values: Valid object name format string. For details, see the table at the bottom of this section.

Changes Take Effect: After restart

Specifies the object name formatting rule for an object of type DN with subtype EA Port. For details, see “Object Properties” at the bottom of this section.

### **Email**

Default Value: %ObjectName%

**Valid Values:** Valid object name format string. For details, see the table at the bottom of this section.  
**Changes Take Effect:** After restart  
Specifies the object name formatting rule for an object of type DN with subtype Email. For details, see “Object Properties” at the bottom of this section.

### **Extension**

**Default Value:** %ObjectName%  
**Valid Values:** Valid object name format string. For details, see the table at the bottom of this section.  
**Changes Take Effect:** After restart  
Specifies the object name formatting rule for an object of type DN with subtype Extension. For details, see “Object Properties” at the bottom of this section.

### **ExtRoutingPoint**

**Default Value:** %ObjectName%  
**Valid Values:** Valid object name format string. For details, see the table at the bottom of this section.  
**Changes Take Effect:** After restart  
Specifies the object name formatting rule for an object of type DN with subtype Ext Routing Point. For details, see “Object Properties” at the bottom of this section.

### **FAX**

**Default Value:** %ObjectName%  
**Valid Values:** Valid object name format string. For details, see the table at the bottom of this section.  
**Changes Take Effect:** After restart  
Specifies the object name formatting rule for an object of type DN with subtype Fax. For details, see “Object Properties” at the bottom of this section.

### **Mixed**

**Default Value:** %ObjectName%  
**Valid Values:** Valid object name format string. For details, see the table at the bottom of this section.  
**Changes Take Effect:** After restart  
Specifies the object name formatting rule for an object of type DN with subtype Mixed. For details, see “Object Properties” at the bottom of this section.

### **Music**

**Default Value:** %ObjectName%  
**Valid Values:** Valid object name format string. For details, see the table at the bottom of this section.  
**Changes Take Effect:** After restart  
Specifies the object name formatting rule for an object of type DN with subtype Music. For details, see “Object Properties” at the bottom of this section.

### **Place**

**Default Value:** %ObjectName%  
**Valid Values:** Valid object name format string. For details, see the table at the bottom of this section.  
**Changes Take Effect:** After restart  
Specifies the object name formatting rule for an object of type Place. For details, see “Object Properties” at the bottom of this section.

### **PlaceGroup**

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Default Value: %ObjectName%

Valid Values: Valid object name format string. For details, see the table at the bottom of this section.

Changes Take Effect: After restart

Specifies the object name formatting rule for an object of type Place Group. For details, see “Object Properties” at the bottom of this section.

### **RoutingPoint**

Default Value: %ObjectName%

Valid Values: Valid object name format string. For details, see the table at the bottom of this section.

Changes Take Effect: After restart

Specifies the object name formatting rule for an object of type DN with subtype Routing Point. For details, see “Object Properties” at the bottom of this section.

### **RoutingQueue**

Default Value: %ObjectName%

Valid Values: Valid object name format string. For details, see the table at the bottom of this section.

Changes Take Effect: After restart

Specifies the object name formatting rule for an object of type DN with subtype Routing Queue. For details, see “Object Properties” at the bottom of this section.

### **RoutingStrategy**

Default Value: %ObjectName%

Valid Values: Valid object name format string. For details, see the table at the bottom of this section.

Changes Take Effect: After restart

Specifies the object name formatting rule for an object of type DN with subtype Routing Strategy. For details, see “Object Properties” at the bottom of this section.

### **Script**

Default Value: %ObjectName%

Valid Values: Valid object name format string. For details, see the table at the bottom of this section.

Changes Take Effect: After restart

Specifies the object name formatting rule for an object of type Script. For details, see “Object Properties” at the bottom of this section.

### **ServiceNumber**

Default Value: %ObjectName%

Valid Values: Valid object name format string. For details, see the table at the bottom of this section.

Changes Take Effect: After restart

Specifies the object name formatting rule for an object of type DN with subtype Service Number. For details, see “Object Properties” at the bottom of this section.

### **StagingArea**

Default Value: %ObjectName%

Valid Values: Valid object name format string. For details, see the table at the bottom of this section.

Changes Take Effect: After restart

Specifies the object name formatting rule for an object of type Script with subtype Staging Area. For details, see “Object Properties” at the bottom of this section.

### **Switch**

Default Value: %ObjectName%

Valid Values: Valid object name format string. For details, see the table at the bottom of this section.

Changes Take Effect: After restart

Specifies the object name formatting rule for an object of type Switch. For details, see “Object Properties” at the bottom of this section.

### **Tenant**

Default Value: %ObjectName%

Valid Values: Valid object name format string. For details, see the table at the bottom of this section.

Changes Take Effect: After restart

Specifies the object name formatting rule for an object of type Tenant. For details, see “Object Properties” at the bottom of this section.

### **Video**

Default Value: %ObjectName%

Valid Values: Valid object name format string. For details, see the table at the bottom of this section.

Changes Take Effect: After restart

Specifies the object name formatting rule for an object of type DN with subtype Video. For details, see “Object Properties” at the bottom of this section.

### **VirtACDQueue**

Default Value: %ObjectName%

Valid Values: Valid object name format string. For details, see the table at the bottom of this section.

Changes Take Effect: After restart

Specifies the object name formatting rule for an object of type DN with subtype Virt ACD Queue. For details, see “Object Properties” at the bottom of this section.

### **VirtRoutingPoint**

Default Value: %ObjectName%

Valid Values: Valid object name format string. For details, see the table at the bottom of this section.

Changes Take Effect: After restart

Specifies the object name formatting rule for an object of type DN with subtype Virt Routing Point. For details, see “Object Properties” at the bottom of this section.

### **VoiceMail**

Default Value: %ObjectName%

Valid Values: Valid object name format string. For details, see the table at the bottom of this section.

Changes Take Effect: After restart

Specifies the object name formatting rule for an object of type DN with subtype Voicemail. For details, see “Object Properties” at the bottom of this section.

### **VoIP**

Default Value: %ObjectName%

Valid Values: Valid object name format string. For details, see the table at the bottom of this section.

Changes Take Effect: After restart

Specifies the object name formatting rule for an object of type DN with subtype VoIP.

### Workbin

Default Value: %ObjectName%

Valid Values: Valid object name format string. For details, see the table at the bottom of this section.

Changes Take Effect: After restart

Specifies the object name formatting rule for an object of type Script with subtype Workbin. For details, see “Object Properties” at the bottom of this section.

### Workflow

Default Value: %ObjectName%

Valid Values: Valid object name format string. For details, see the table at the bottom of this section.

Changes Take Effect: After restart

Specifies the object name formatting rule for an object of type DN with subtype Workflow For details, see “Object Properties” at the bottom of this section.

### Valid object name format string

The valid object name format string is free text string, which allows values of object properties:

%<PropertyName>:<side><padding><length>%

- PropertyName—Specifies the property name.  
**Note:**Property names are case sensitive.
- side—Specifies the side, L (left) or R (right) , from where the length must be counted. If you do not specify a side, Genesys Pulse uses L by default.  
L is commonly used for string or text properties.  
R is commonly used for numbers.
- padding—Specifies the padding when the property value length is less than the specified custom length  
. (dot) to pad with space characters  
0 (zero) to pad with zero characters.
- length—Specifies the maximum number of characters for the property name.

Valid Object Name Format String	Description
<ul style="list-style-type: none"> <li>• %EmployeeID:10%</li> <li>• %EmployeeID:L10%</li> </ul>	Both specify 10 characters of property EmployeeID from the left side.
<ul style="list-style-type: none"> <li>• %EmployeeID:.10%</li> <li>• %EmployeeID:L.10%</li> </ul>	Specifies 10 characters of property EmployeeID from left, but if length was less than 4 symbols, pad it with spaces.
<ul style="list-style-type: none"> <li>• %DBID:R4%</li> </ul>	Specifies 4 characters of property DBID from the right side.
<ul style="list-style-type: none"> <li>• %DBID:R04%</li> </ul>	Specifies 4 characters of property DBID from the right side, but if the length is less than 4 characters, pads it with zeros.

## Object Properties

The table below lists the object properties available for use in the format strings.

Object Type	Property	Description
All Object Types	CustomName	<p>You can specify an object name to use only within Genesys Pulse that is different than the actual object name in the Configuration Server. When this is configured you can see the custom object name in Genesys Pulse widgets, although you still see the original object name when choosing objects for your widget in Genesys Pulse.</p> <p>This is the useful for Virtual Queues when their Display Name is used in strategies, but not recommended for Genesys Pulse.</p> <p>To configure a custom Genesys Pulse object name for Configuration Server object:</p> <ol style="list-style-type: none"> <li>1. Set the Object Annex option named <code>display_name</code>, placed in the <code>[pulse]</code> section for one or many objects.</li> <li>2. Configure Genesys Pulse Collector to use custom Genesys Pulse Object Name by configuring object name format with format string <code>%CustomName%</code>.</li> <li>3. The Object Name format is configured in Genesys Pulse Collector options section <code>[object-name-format]</code>.</li> </ol> <p>If the custom name is not defined, the <code>%objectName%</code> value is used.</p> <p><b>Special case:</b> For the Campaign Calling List (assignment of a Calling List to a Campaign rather than a native Configuration Server object), the custom name is a combination of the custom names of the corresponding Calling List and Campaign name. If some part of this name is not defined, the <code>%objectName%</code> value is used.</p>
All Object Types	DBID	Specifies the ID of the object. For example, Campaign Group is in group DBID, Campaign Calling List is in CallingList ID.
All Object Types	ObjectID	Specifies the ID number of the

Object Type	Property	Description
		<p>object in Genesys Pulse Collector.</p> <p><b>Notes:</b></p> <ul style="list-style-type: none"> <li>This is the typically the configuration layer DBID, but for some types of objects (for example, Campaign Group, Campaign Calling List) this is a composite 64-bit ID.</li> <li>The composite 64-bit ID is an unsigned 64-bit number with the following composition: <ul style="list-style-type: none"> <li>higher 32 bits: DBID of Campaign</li> <li>lower 32 bits: DBID of Calling List or Agent/Place group</li> </ul> </li> </ul>
All Object Types	ObjectName	Specifies the name of the object, which is written to the snapshot file.
All Object Types	ObjectType	Specifies the type of the object.
All Object Types	TenantID	Specifies the Tenant ID of the object.
All Object Types	type	Specifies the type of the object.
Agent	EmailAddress	Specifies the email address of the agent (person).
Agent	EmployeeID	Specifies the employee ID of the agent (person).
Agent	ExternalID	Specifies the external ID of the agent (person).
Agent	FirstName	Specifies the first name of the agent (person).
Agent	LastName	Specifies the last name of the agent (person).
Agent	UserName	Specifies the user name of the agent (person).
Calling List	Description	Describes the calling list.
Campaign	Description	Describes the campaign.
Campaign Calling List	CallingListDescription	Describes the underlying Calling List object.
Campaign Calling List	CallingListName	Specifies the DBID of the Calling List object.
Campaign Calling List	CampaignDBID	Specifies the DBID of the Campaign object.

Object Type	Property	Description
Campaign Group	CampaignDBID	Specifies the DBID of the Campaign object.
Campaign Group	GroupDBID	Specifies the DBID of the group object.
Campaign Group	GroupType	Specifies the numeric Type of the group object (CFGAgentGroup or CFGPlaceGroup).
DN, Routing Queue, Routing Point	Alias	Specifies the DN Alias.
DN, Routing Queue, Routing Point	AliasOrNumber	Populated with the DN Alias if available, otherwise populated with the DN number.
DN, Routing Queue, Routing Point	Number	Specifies the DN number.
DN, Routing Queue, Routing Point	SwitchDBID	Specifies the switch DBID.
DN, Routing Queue, Routing Point	SwitchID	Specifies the switch name.
Routing Strategy, Staging Area, Workbin	ScriptType	Specifies the script type ID.
Switch	DNRange	Specifies the switch DN Range.
Switch	SwitchType	Specifies the switch type.

## [output] Section

### **collector-snapshot-log-level**

Default Value: Warning

Valid Values: Debug, Info, Warning, Error, Fatal, Unknown, None (case-insensitive)

Changes Take Effect: After restart

Determines minimum log level for snapshot message that is written to Genesys Pulse Collector log.

### **max-output-interval**

Default Value: 3600

Valid Values: 3–3600

Changes Take Effect: After restart

Specifies the maximum allowed output interval for all report layouts. Users can independently set output frequencies by layout within the Genesys Pulse user interface. If the set frequency, however, is greater than the value of this option, Genesys Pulse uses the value of this option instead.

**Note:** The value of this option must be greater than the value of the min-output-interval option or Genesys Pulse Collector logs an appropriate error.

### **min-output-interval**

Default Value: 3

Valid Values: 3–3600

Changes Take Effect: After restart

Specifies the minimum allowed output interval for all report layouts. Users can independently set output frequencies by layout within the Genesys Pulse user interface. If the set frequency, however, is less than the value of this option, Genesys Pulse uses the value of this option instead.

### **snapshot-log-level**

Default Value: Info

Valid Values: Debug, Info, Warning, Error, Fatal, Unknown, None (case-insensitive)

Changes Take Effect: After restart

Specifies the minimum log level for a snapshot message that is put into a layout snapshot.

## [parallel-processing] Section

### **inactive-stat-data-processing-thread-gc-threshold**

Default Value: 1800

Valid Values: 1-86400

Changes Take Effect: After restart

Defines, how much time, in seconds, Genesys Pulse Collector keeps previously allocated statistical data processing thread, which is currently inactive, before it is collected as garbage object.

**Note:** This parameter defines the minimum timeout. Actual garbage collection happens the next time Genesys Pulse Collector attempts to activate the layout or after a full configuration recheck cycle for a changed layout.

### **snapshot-builder-worker-thread-count**

Default Value: 2

Valid Values: 1-128

Changes Take Effect: After restart

Defines the number of concurrent threads used to build snapshots.

### **stat-data-processing-thread-max-load-factor**

Default value: 300

Valid Values: 1-300

Changes Take Effect: After restart

Specifies that a dynamic stat data processing pool is used and that the number of threads in that pool have no more layouts than specified in this option for each processing thread.

For example, if you have 1000 widget layouts and this option set to 100 then 10 stat data processing threads are created.

### **stat-data-processing-thread-pool-size**

Default Value: 4

Valid Values: 0...256

Changes Take Effect: After restart

Specifies the number of threads in stat data processing thread pool. If this number is non-zero, then a fixed-size pool with the specified number of threads is used; otherwise; a dynamic-size pool is used, which is controlled by option `stat-data-processing-thread-max-load-factor`.

Setting this option to 0 or any value  $\geq 2$  only takes effect when the `use-multiple-stat-data-processing-threads` option is set to yes.

### **use-multiple-stat-data-processing-threads**

Default Value: yes

Valid values: yes, no

Changes Take Effect: After restart

Enables multi-threaded statistic data processing.

## [scripting] Section

### **definition-script-execution-timeout**

Default Value: 45  
Valid Values: 1-900  
Changes Take Effect: After restart  
Time in seconds allowed for definition script execution.

### **formula-script-execution-timeout**

Default Value: 5  
Valid Values: 1-900  
Changes Take Effect: After restart  
Time in seconds allowed for single formula evaluation script execution.

### **init-script-execution-timeout**

Default Value: 60  
Valid Values: 1-900  
Changes Take Effect: After restart  
Time in seconds allowed for initialization script execution.

### **js-lib-path**

Default Value: ./jslib/standard  
Valid Values: Valid folder paths  
Changes Take Effect: After restart  
Comma-separated list of locations of the directories that contain additional JavaScript libraries to be used within the formula scripting engine.  
**Note:** Relative file paths must begin with ./

### **js-modules**

Default Value: collector.js,cfplib.js,statlib.js,gts.js  
Valid Values: Comma-separated list of JavaScript files  
Changes Take Effect: After restart  
Comma-separated list of modules to preload into the scripting engine.

### **stop-compute-formula-threshold-for-snapshot**

Default Value: 3  
Valid Values: 0-100  
Change Take Effect: After restart  
Specifies the maximum allowed number of `timeout_expired` errors during formula computation, after which, Genesys Pulse Collector assigns the particular formula-based statistic the `ERROR` value for the current snapshot. A zero value of this option suppresses the limit of the `timeout_expired` failures.

## [statistic-request-handling] Section

### **always-use-statserver-newapi**

Default Value: yes  
Valid Values: yes, no

---

Changes Take Effect: After restart

Determines whether to force Genesys Pulse Collector to request all statistics through the Stat Server New API that uses the proper parameter set.

### **default-insensitivity-percentage**

Default Value: 0

Valid Values: 0-10000

Change takes effect: After restart

The amount of relative change (in percentage) in the value of floating-point statistics required to generate a data change notification. The insensitivity value is added to all floating-point statistic requests. The default value of 0 (zero) means no insensitivity value will be added.

### **default-insensitivity-absolute-value**

Default Value: 0

Valid Values: 0-1000000

Change takes effect: After restart

The amount of absolute change in the value of long integer statistics required to generate a data change notification. The insensitivity value is added to all long integer statistic requests. The default value of 0 (zero) means no insensitivity value will be added.

### **data-source-choice-strategy**

Default Value: PrimaryRunMode

Valid Values: PrimaryRunMode, LastGood, MostUpToDate, PrimaryInCME, Local

**Note:** All values are case-insensitive.

Changes Take Effect: After restart

Specifies which Stat Server configured in the configuration layer that Genesys Pulse Collector uses as a data source for a snapshot:

- PrimaryRunMode—Genesys Pulse Collector uses the Stat Server running in the primary mode. If both Stat Servers appear to be backup, Genesys Pulse Collector attempts the next strategy.
- LastGood—Genesys Pulse Collector uses the last good Stat Server if available. Otherwise, Genesys Pulse Collector attempts the next strategy.
- MostUpToDate—Genesys Pulse Collector uses Stat Server that sent statistic data with most recent Server Time. Otherwise, Genesys Pulse Collector attempts the next strategy.
- PrimaryInCME—Genesys Pulse Collector uses the Primary Stat Server if available. If the Primary Stat Server is unavailable, Genesys Pulse Collector uses the Backup Stat Server. Otherwise, Genesys Pulse Collector attempts the next strategy.
- Local—Genesys Pulse Collector uses Stat Server installed on the same host. If both Primary and Backup Stat Servers are local or none of them is installed on the same host, then the PrimaryRunMode strategy is applied.

### **max-stat-data-queue-size**

Default Value: 2147483647

Valid Values: 1-2147483647

Changes Take Effect: After restart

Specifies the limit for the internal Genesys Pulse Collector statistical data queue, which stores unprocessed data from Stat Server. Genesys Pulse drops incoming data exceeds this limit. Genesys recommends you set the value of this option to an at least **six times** the expected maximum total

number of statistics.

**max-stat-reopen-count**

Default Value: 5

Valid Values: 0-1000

Changes Take Effect: After restart

Introduced: Genesys Pulse Collector 9.0.006.04

Specifies the number of attempts to reopen statistics after generally unrecoverable error. A timeout between reopen attempts is controlled by the **open-stat-retry-timeout** option.

**min-notification-interval**

Takes effect: After restart

Valid values: 1...86400

Default value: 10

Description: Minimum allowed notification interval for the time-based statistics. If a statistic is configured with notification interval that is lower than the one configured here, Pulse Collector uses the value from this option.

**open-stat-retry-timeout**

Default Value: 30

Valid Values: 1-3600

Changes Take Effect: After restart

Specifies the timeout in seconds, that Genesys Pulse Collector waits before attempting to re-open a failed statistic if Stat Server indicates that the error is recoverable.

**optimize-statistic-requests**

Default Value: yes

Valid Values: yes, no

Changes Take Effect: After restart

Specifies whether to enable statistic request optimization.

**statserver-batch-size**

Default Value: 500

Valid Values: 1-10000

Changes Take Effect: Immediately

Specifies the number of statistic requests sent to Stat Server in a single packet. The recommended value depends on the number of statistic requests you plan to run, network bandwidth, and processing capabilities of the Stat Server and Genesys Pulse Collector servers. If Stat Server disconnects Genesys Pulse Collector when it is opening statistics with error message Client too slow, decrease value of this option.

**statserver-profiles-timeout**

Default Value: 600

Valid Values: 1-86400

Changes Take Effect: Immediately

Specifies the timeout, in seconds, to receive and process server profiles from Stat Server. If profiles are not received and processed within the given timeout, Genesys Pulse Collector closes the current connection to Stat Server and attempts to reconnect.

### **suspend-notifications-from-secondary-server**

Default value: yes

Valid values: yes, no

Change takes effect: After restart

Specifies whether Genesys Pulse Collector should attempt to use Stat Server's capability to quickly suspend and resume notifications for all request, when data from a particular Stat Server is not used at the moment to generate snapshots. To use this option, you must have Stat Server release 8.5.102 or later.

### **suspend-statistic-notifications-for-paused-layouts**

Default Value: no

Valid Values: yes, no

Changes Take Effect: After restart

Determines whether to suspend the statistic notifications for paused layouts.

**Note:** You must have Stat Server version 8.1.200.17 or higher for this functionality to work correctly, if you set the value of suspend-statistic-notifications-for-paused-layouts to yes.

### **verbose-request-statistics**

Default Value: false

Valid Values: true, false

Changes Take Effect: Immediately

Determines whether to enable Genesys Pulse Collector to log verbose messages about the objects for which it requests statistics.

## [transport-aeron] Section

### **disabled**

Default Value: no

Valid Values: yes, no

Changes Take Effect: After restart

Controls whether the Aeron transport is enabled or disabled.

### **Important**

Prior to release 9.0.001, Genesys Pulse and Genesys Pulse Collector do not support Aeron transport configured on Windows.

### **driver-directory**

Default Value: No default value

Valid Values: Any valid folder path

Changes Take Effect: After restart

A path to the Aeron Media Driver directory.

### **endpoints**

Default Value: localhost: 40123

Valid Values: A comma-separated list of host and port pairs.

Changes Take Effect: After restart

A comma-separated list of host and port pairs. Host can be a multicast group IP address, a network host IP or a host name. Note, that if the host name is used then an attempt to resolve it to an IP address should yield the identical results on both the target host and the host where Genesys Pulse Collector is installed. Do not use localhost in the multihost installation.

### **reconnect-interval**

Default Value: 10

Valid Values: 0-3600

Changes Take Effect: After restart

A timeout, in seconds, to wait before attempting a reconnect to Aeron Media Driver.

### **stream-id**

Default Value: 10

Valid Values: 1-2147483647

Changes Take Effect: After restart

Specifies the id of an Aeron stream to publish snapshots to.

## [transport-file] Section

### **Important**

See the **important note** in the [heartbeat] section to see how Genesys Pulse uses the folder options.

### **compression-method**

Default Value: None

Valid Values: None, LZ4 (case-insensitive)

Changes Take Effect: After restart

Specifies whether compression should be used and which type of compression to use for the snapshot files.

### **enable-latest-snapshot-output**

Default Value: no

Valid Values: yes, no

Changes Take Effect: After restart

Specifies whether separate output of the latest full snapshot is enabled.

### **external-latest-snapshot-output-folder**

Default Value: No default value

Valid Values: Network or locally mounted path to the latest-snapshot-output-folder that is accessible from a remote Genesys Pulse instance.

Changes Take Effect: After restart

Enables a remote Genesys Pulse instance to access the latest Genesys Pulse Collector output files. This option must be used together with the latest-snapshot-output-folder. The value of this option is ignored by Genesys Pulse in cases when both Genesys Pulse Collector and Genesys Pulse are configured on the same host.

Deprecated since release 9.0.000, configure [Genesys Pulse with WebDAV](#) instead.

#### **external-latest-snapshot-output-url**

Default Value: No default value

Valid Values: Valid HTTP URL to a latest-snapshot-output-folder through WebDAV server. For example, [http://host1:8080/latest\\_snapshot](http://host1:8080/latest_snapshot)

Changes Take Effect: After restart

Enables a remote Genesys Pulse instance to access latest snapshot through WebDAV server. This option must be used together with the latest-snapshot-output-folder. The value of this option is ignored by Genesys Pulse in cases when both Genesys Pulse Collector and Genesys Pulse are configured on the same host or the external-output-folder option is specified.

#### **external-output-folder**

Default Value: No default value

Valid Values: Network or locally mounted path to the heartbeat-folder accessible from a remote Genesys Pulse instance

Changes Take Effect: After restart

Enables a remote Genesys Pulse instance to access the Genesys Pulse Collector output files. This option must be used together with the output-folder.

**Note:** Relative file paths must begin with `./`

Deprecated since release 9.0.000, configure [Genesys Pulse with WebDAV](#) instead.

#### **external-output-url**

Default Value: No default value

Valid Values: valid HTTP URL to a snapshot's folder on WebDAV server. For example, <http://host1:8080/output>

Changes Take Effect: After restart

Enables a remote Genesys Pulse instance to access snapshots through WebDAV server. This option must be used together with the output-folder. The value of this option is ignored by Genesys Pulse in case when Genesys Pulse Collector and Genesys Pulse are configured on the same Host or external-output-folder option is specified.

#### **latest-snapshot-output-folder**

Default Value: `./output/latest`

Valid Values: Valid file path

Changes Take Effect: After restart

Specifies the path to store the output of the latest full snapshot.

**Note:** Relative file paths must begin with `./`

#### **lz4-compression-level**

Default Value: 1

Valid Values: 1-16

Changes Take Effect: After restart

Specifies the compression level for the LZ4 compression method.

**output-file-ext**

Default Value: gpb

Valid Values: Valid file extensions for your operating system

Changes Take Effect: After restart

Specifies the file extension for the full output file format.

**output-file-mode**

Default Value: 0664

Valid Values: 0-0777

Changes Take Effect: After restart

On Linux, specifies the UNIX mode for each output file created by this transport.

**Important!** This option respects umask set at OS level.

**output-folder**

Default Value: No default (the Collector.apd file supplies the value of a sample output directory)

Valid Values: Valid folder paths

Changes Take Effect: After restart

Specifies the path in which Genesys Pulse Collector writes output files. If you specify a folder that does not exist, Genesys Pulse Collector creates it for you.

**Note:** Relative file paths must begin with ./

**worker-thread-count**

Default Value: 2

Valid Values: 1-128

Changes Take Effect: After restart

Defines the number of concurrent threads used to write snapshots.

[transport-rabbitmq] Section

**disabled**

Default Value: no

Valid Values: yes, no

Changes Take Effect: After restart

Disables RabbitMQ messaging.

**exchange**

Default Value: <None>

Valid Values: A non-empty sequence of these characters: letters, digits, hyphen, underscore, dot, or colon.

Changes Take Effect: After Genesys Pulse Collector restart

Specifies the full name of a RabbitMQ exchange where Genesys Pulse Collector writes delta messages. The value of exchange option should be same for the primary and backup Genesys Pulse Collectors if you want to enable HA for quick updates. This, however, might significantly increase traffic between RabbitMQ nodes. If you use different values for this option for Primary and Backup Genesys Pulse Collectors then the network traffic will be reduced significantly but Quick updates might not work if one of the Genesys Pulse Collectors is down

**max-queue-length**

Default Value: 1000

Valid Values: 1-10000

Changes Take Effect: After restart

Specifies the maximum number of messages allowed in the queue.

**nodes**

Default Value: localhost:5672

Valid Values: hostname1:port1, hostnameN:portN

You must specify the port value: 0-65535.

Changes Take Effect: After restart

Lists a single host name with a port for a single node configuration, and all cluster nodes host names and ports for the cluster configuration. **Note:** If Genesys Pulse Backend and Genesys Pulse Collector it connects to run on one of the hosts in the list, put this host as the first entry in the list.

**password**

Default Value: pulse

Valid Values: String

Changes Take Effect: After restart

Specifies the password for the username.

**reconnect-interval**

Default Value: 10

Valid Values: 0-3600

Changes Take Effect: After restart

Specifies the time interval, in seconds, between reconnection attempts.

**username**

Default Value: pulse

Valid Values: String

Changes Take Effect: After restart

Specifies the username.

**vhost**

Default Value: /pulse

Valid Values: String

Changes Take Effect: After restart

Specifies the path to the virtual host.

[transport-webdav] Section

**output-url**

Default Value: No default value

Valid Values: Valid URL

Changes Take Effect: After Genesys Pulse restart

WebDAV URL to access snapshots generated by Genesys Pulse Collector. If this option is specified, values of the **[transport-file]/external-output-url** and **[transport-file]/external-output-folder**

options are ignored.

**heartbeat-url**

Default Value: No default value

Valid Values: Valid URL

Changes Take Effect: After Genesys Pulse restart

WebDAV URL to access the heartbeat file generated by Genesys Pulse Collector. If this option is specified, values of the **[heartbeat]/external-heartbeat-url** and **[heartbeat]/external-heartbeat-folder** options are ignored.

**latest-snapshot-output-url**

Default Value: No default value

Valid Values: Valid URL

Changes Take Effect: After Genesys Pulse restart

WebDAV URL to access the latest snapshots generated by Genesys Pulse Collector. If this option is specified, values of the **[transport-file]/external-latest-snapshot-output-url** and **[transport-file]/external-latest-snapshot-output-folder** options are ignored.

**username**

Default Value: No default value

Valid Values: Any string

Changes Take Effect: After Genesys Pulse restart

The username for authentication on WebDAV Server.

**password**

Default Value: No default value

Valid Values: Any string

Changes Take Effect: After Genesys Pulse restart

The password for authentication on WebDAV Server.

**connection-timeout**

Default Value: 5000

Valid Values: 0 - 2147483647

Changes Take Effect: After Genesys Pulse restart

Time, in milliseconds, to wait until the connection to WebDAV Server is established.

[embedded-dbserver] section

**msql\_name**

Valid values: Path to Genesys DB client executable for Microsoft SQL Server.

Default value: empty

Takes effect: After restart

Description: Specified path to Genesys DB client executable for Microsoft SQL Server. Empty value or missing option will result in using platform-specific default, which targets to platform-specific DB client executable located under path `./dbclients`

**oracle\_name**

Valid values: Path to Genesys DB client executable for Oracle.

Default value: empty

Takes effect: After restart

Description: Specified path to Genesys DB client executable for Oracle. Empty value or missing option will result in using platform-specific default, which targets to platform-specific DB client executable located under path `./dbclients`.

### **postgre\_name**

Valid values: Path to Genesys DB client executable for PostgreSQL.

Default value: empty

Takes effect: After restart

Description: Specified path to Genesys DB client executable for PostgreSQL. Empty value or missing option will result in using platform-specific default, which targets to platform-specific DB client executable located under path `./dbclients`.

## [log-db] section

Options in this section control embedded DB Server log and take effect if **[collector]/dbthread** option is set to **yes**. For more information, see [Configure Genesys Pulse Collector with an Embedded DB Server](#). Log options are inherited from the [Common Log Options](#) section of the *Framework Configuration Options Reference Manual*.

### **all**

Default Value: No default value

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 log events in the Log Database.

Setting the `all` log-level option to `network` enables Data Sourcer to send log events of Standard, Interaction, and Trace levels to Message Server. Log events of Debug level 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 output is the safest in terms of the application performance.
- `[filename]`—Log events are stored in a file with the specified name. If you do not specify a path, the file is created in the application's working directory.

Changes Take Effect: after restart

Specifies the outputs to which an application sends all log events. You must separate log-output types with commas when you configure more than one output type.

For example, `all = stdout, logfile`

### **Notes:**

- To ease the troubleshooting process, consider using unique names for log files that different applications generate.
- Relative file paths must begin with `./`

## **buffering**

---

Default Value: false

Valid Values: true, false

Changes Take Effect: after restart

Specifies whether the operating system file buffering is on or off. This option applies only to stderr and stdout output. Setting this option to true increases output performance.

**Note:** When you enable buffering, log messages might appear in the log after a delay.

### **expire**

Default Value: false

Valid Values:

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

Changes Take Effect: after restart

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.

### **segment**

Default Value: 10 MB

Valid Values:

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

Changes Take Effect: after restart

Specifies if there is a segmentation limit for a log file. If there is, this option sets the unit of measurement along with the maximum size. If the current log segment exceeds the size set by this option, the current file is closed and a new file is created.

### **verbose**

Default Value: all

Valid Values:

- all—All log events (that is, log events of Standard, Trace, Interaction, and Debug levels) are generated if you set the debug-level option in the statsserver section to all.
- debug—The same as all.
- trace—Log events of the Trace and higher levels (that is, log events of Standard, Interaction, and Trace levels) are generated, while log events of the Debug level are not generated.

- **interaction**—Log events of the Interaction and higher levels (that is, log events of Standard and Interaction levels) are generated, while log events of the Trace and Debug levels are not generated.
- **standard**—Log events of the Standard level are generated, while log events of the Interaction, Trace, and Debug levels are not generated.
- **none**—Produces no output.

**Changes Take Effect:** after restart

Determines whether a log output is created. If it is, this option specifies the minimum level of log events that are generated. The log-event levels, starting with the highest-priority level, are Standard, Interaction, Trace, and Debug.

Refer to the *Framework Management Layer User's Guide* for more information on the Standard, Trace, Interaction, and Debug log levels.

## Access Groups Object

To optimize resources utilization by Genesys Pulse, the following options can be configured on the **Annex** tab of Access Groups in the **[pulse]** section.

### **max\_tabs\_per\_user**

**Default Value:** No default value

**Valid Values:** zero or any positive number

**Changes Take Effect:** After user re-login

Limits the number of dashboards for each member of a group, 0 means no limit.

The SYSTEM account (or account under which Genesys Pulse runs) must have the Read access to the appropriate Access Group with the specified option.

If a person, who needs to be limited by the number of dashboards, is the member of two or more Access Groups with the `max_tabs_per_user` option specified, the effective limit is the biggest (less restrictive) of all limits. If the option is not specified or set to 0 (no limit) on the Access Group level, the application level `max_tabs_per_user` option is applied.

### Tip

You can use the Pulse `Add Dashboards Without Limit` **privilege** to set no limits for particular users.

### **max\_widgets\_per\_user**

**Default Value:** No default value

**Valid Values:** zero or any positive number

**Changes Take Effect:** After user re-login

Limits the number of widgets for each member of a group, 0 means no limit.

The SYSTEM account (or account under which Genesys Pulse runs) must have the Read access to the

appropriate Access Group with the specified option.

If a person, who needs to be limited by the number of widgets, is the member of two or more Access Groups with the `max_widgets_per_user` option specified, the effective limit is the biggest (less restrictive) of all limits. If the option is not specified or set to 0 (no limit) on the Access Group level, the application level `max_widgets_per_user` option is applied.

### Tip

You can use the Pulse Add Widgets Without Limit **privilege** to set no limits for particular users.

## Data Access Point Application Object

To specify the database access, configure the **[Pulse]** section on the Application Options tab of your Genesys Pulse DAP with the following option:

### **jdbc\_url**

Default Value: No default value

Valid Values: string jdbc url

Changes Take Effect: After restart

Genesys Pulse connects to the database using customized JDBC URL specified in DAP. If this option is not configured, Genesys Pulse uses the DAP Application object values for establishing the connection.

A sample URL for the MSSQL database:

```
jdbc:sqlserver://<host>:<port, usually 1433>;Database=<database name>;username=<username>;password=<password>;authentication=SqlPassword
```

A sample URL for the PostgreSQL database:

```
jdbc:postgresql://<host>:<port, usually 5432>/<database name>;username=<username>;password=<password>;ssl=true
```

A sample URL for the Oracle database:

```
jdbc:oracle:thin:@(DESCRIPTION=(ADDRESS=(PROTOCOL=TCPS)(HOST=<host>)(PORT=<port, usually 1521>))(CONNECT_DATA=(SERVICE_NAME=<database name>))(FAILOVER_MODE=(TYPE=SELECT)(METHOD=BASIC)(RETRIES=10)(DELAY=5))))
```

### Tip

The username and password, in the URL, are optional for security reasons, and may not be specified. If the username and password are specified, Genesys Pulse considers them to be the access credentials to the Genesys Pulse Database, and makes the connection. If not specified, Genesys Pulse takes the username and password from the

General tab of the DAP Application object.

### Important

Each DBMS configures URL in different ways. You must provide the URL in the correct format and syntax as required for your DBMS. Genesys Pulse cannot establish connection to the Database if the URL is incorrect or improperly formed.

#### **connect\_timeout**

Default Value: 30

Valid Values: 0 (zero) or any positive number

Changes Take Effect: After restart

Introduced: Genesys Pulse 9.0.006.03 for PostgreSQL; Genesys Pulse 9.0.008.02 for all supported databases

The amount of time, in seconds, to wait for a socket connection. A 0 value means no timeout. This option is ignored for PostgreSQL and MS SQL Server when `jdbc_url` is specified, and the value is taken from custom `jdbc_url`.

#### **login\_timeout**

Default Value: 30

Valid Values: any positive number

Changes Take Effect: After restart

Introduced: Genesys Pulse 9.0.006.03 for PostgreSQL; Genesys Pulse 9.0.008.02 for all supported databases

The amount of time, in seconds, to wait for a database connection once the driver has been identified. This option is ignored for PostgreSQL and MS SQL Server when `jdbc_url` is specified, and the value is taken from custom `jdbc_url`.

#### **socket\_timeout**

Default Value: 30

Valid Values: 0 (zero) or any positive number

Changes Take Effect: After restart

Introduced: Genesys Pulse 9.0.006.03 for PostgreSQL; Genesys Pulse 9.0.008.02 for all supported databases

The amount of time, in seconds, to wait for a network socket operations. A 0 value means no timeout. This option is ignored for PostgreSQL and MS SQL Server when `jdbc_url` is specified, and the value is taken from custom `jdbc_url`.

### Important

Long-running operations with the database (such as importing a large number of

Dashboards, Wallboards or Widget Templates) can fail with a Could not connect to the database error in UI and the exception message The connection is closed. in the Pulse log when the configured values used for connect\_timeout, login\_timeout and socket\_timeout options for Pulse DAP are too small. Workaround: Increase the connect\_timeout, login\_timeout and socket\_timeout option values for Pulse DAP.

**tls\_mode**

Default Value: off

Valid Values: off, request, require, authenticate

Changes Take Effect: After restart

Introduced: Genesys Pulse 9.0.008.02

The option allows to configure secured connection between Pulse and DBMS. Choose appropriate mode according to your DBMS:

Option value / DBMS	PostgreSQL JDBC URL and Connection property	MS SQL Server JDBC URL	ORACLE JDBC URL and Connection property
off, or no option entered	ssl=false Connection property sslmode is set to disable	authentication=NotSpecified	protocol=TCP
request	ssl=true	authentication=SqlPassword	protocol=TCP
require	ssl=true	authentication=SqlPassword	protocol=TCPS Connection property oracle.net.ssl_cipher_suites is set to certain cipher suites
authenticate	ssl=true	authentication=SqlPassword trustServerCertificate=false	protocol=TCPS