

# **GENESYS**

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

# Genesys Pulse Deployment Guide

**Pulse Configuration Options** 

# Contents

- 1 Pulse Configuration Options
  - 1.1 GAX Application Object
  - 1.2 Pulse Collector Application Object

# Pulse Configuration Options

The application templates for 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 Pulse. Pulse supplies default values for all options that it requires to function.

# **GAX** Application Object

# [pulse] Section

#### access url

Valid Values: http://<gax host>:<gax\_port>

gax host—The name or IP address of the GAX host computer

gax port—The port of the GAX server For example: http://pulsedev01:8280/gax

Default Value: http://host:port Changes Take Effect: After restart

Specifies the URL of the Genesys Administrator Extension (GAX) in which Pulse has been configured. Configure this option only for High Availability (HA) configuration. You must configure this option for every GAX instance. For example, configure GAX1 host computer information for «access url» GAX1 and GAX2 host computer information for «access url» GAX2. If Pulse is behind a network load balancer, then both URLs should be empty.

Pulse shows the Collector does not respond error containing a link to the Pulse backup if available when the access url option is configured and not empty.

Pulse shows the latest available data even if Collector is down, along with a Collector does not respond error when access url option is empty.

Note: The URL must be accessible from the Pulse user network. If Pulse is behind a load balancer, then access url should be empty. In scenarios with a load balancer, the health-check must be configured.

#### cache expire timeout

Valid Values: zero or any positive number

Default Value: 1200

Changes Take Effect: After restart

Specifies how long, in seconds, that Pulse stores the results of the object accessibility check in order

to reduce the load on the Configuration server.

#### editable templates Valid Values: true, false

Default Value: false

Changes Take Effect: After restart

Enables users with appropriate permissions to edit Genesys-provided templates. If false, even and 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.

#### health\_expire\_timeout

Valid Values: zero or any positive number

Default Value: 30

Changes Take Effect: After restart

Specifies how long, in seconds, Pulse stores result of previous health check, which includes the

heartbeat, DB connection, and Configuration Server connection.

#### install templates

Valid Values: true,false Default Value: true

Changes Take Effect: After restart

Used in conjunction with the editable\_templates option, specifies whether Pulse installs or updates the Genesys-provided templates for the current release when 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 Pulse restores all original Genesys-provided templates after restart for the current release. Pulse restores only templates from the current release, not earlier releases, which may be obsolete.

#### snapshot\_expire\_timeout

Valid Values: positive integer

Default Value: 24

Changes Take Effect: After restart

Specifies how long, in hours, that the snapshot file remains before 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.

# Pulse Collector Application Object

# [collector] Section

#### hostname

Valid Values: Valid host name Default Value: Empty value Changes Take Effect: After restart

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

#### management-port

Valid Values: Positive integers Default Value: No default value Warning! No other application should use this port.

Changes Take Effect: After restart

Specifies the TCP/IP port that 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 Pulse Collector is running.

change the value for this option while Pulse Collector is running.

#### output-transport

Default Value: No default value (but the application template supplies the preconfigured transport

name of gpb-out)

Valid Values: the names of all transport protocols that you have defined in the [transport-gpb-out]

section.

Changes Take Effect: After restart

Specifies the output transport to be used to produce outputs.

# [configuration-monitoring] Section

#### check-layout-presence-timeout

Valid Values: 0-3600 Default Value: 900

Changes Take Effect: After restart

Specifies how often, in seconds, 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

Valid Values: 3-3600 Default Value: 30

Changes Take Effect: After restart

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

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

#### excluded-objects-propagation-delay

Valid Values: 0...3600 Default value: 60

Changes Take Effect: Immediately

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

#### metagroup-contents-recheck-delay

Valid Values: 0...3600 Default Value: 60

Changes Take Effect: Immediately

Specifies the delay in seconds between when Pulse Collector verifies metagroup contents (such as Agent Group, Place Group, and DN Group) after notification from Configuration Server notifies 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

Valid Values: 0-86400 Default Value: 0

Changes Take Effect: Immediately

Specifies the delay, in seconds, between when 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 Pulse Collector to process new objects without delays.

#### ods-wait-timeout

Valid Values: 10-3600 Default Value: 300

Changes Take Effect: After restart

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

proper initialization.

#### remove-dynamic-object-delay

Valid Values: 0-600 Default Value: 60

Changes Take Effect: After restart

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

# [heartbeat] Section

#### heartbeat-folder

Valid Values: Valid folder path

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

Changes Take Effect: After restart

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

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

#### heartbeat-period

Valid Values: 3-3600 Default Value: 30

Changes Take Effect: After restart

Specifies the period of a heartbeat update, in seconds.

#### heartbeat-success-condition

Valid Values:

One or any combination of the following conditions:

• statserver—Stat Server connection should be available.

- snapshot-writer—The snapshot writer should be producing outputs without error.
- collector-db—The main DB connection should be available.

Default Value: statserver, snapshot-writer

Changes Take Effect: After restart

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

Valid Values: yes,no Default Value: yes

Changes Take Effect: After restart

Enables or disables layout validation in Pulse Collector.

Note: Pulse Collector always checks for consistency of LayoutID and TenantID. These validations

apply even if options are set to a value no.

#### validate-strict-tenant-security

Valid Values: yes,no Default Value: yes

Changes Take Effect: After restart

Enables Pulse Collector to fail the layout validation when the option strict-tenant-security in the configuration-monitoring section is set to yes and Pulse encounters an individual object that belongs to a tenant that is different than layout's tenant.

# [limits] Section

## max-formulas-per-layout

Valid Values: 1-100000 Default Value: 50

Changes Take Effect: After restart

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

#### max-metagroups-per-layout

Valid Values: 1-100000 Default Value: 50

Changes Take Effect: After restart

Specifies the maximum number of metagroups for each layout.

#### max-objects-per-layout

Valid Values: 1-100000 Default Value: 400

Changes Take Effect: After restart

Specifies the maximum number of objects for each layout.

#### max-statistics-per-layout

Valid Values: 1-100000 Default Value: 100

Changes Take Effect: After restart

Specifies the maximum number of statistics for each layout.

# [localization] Section

#### default-snapshot-message-language-code

Valid Values: Language code (non-empty string, typically 2 letters)

Default Value: en

Changes Take Effect: After restart

Specifies the default language code to use for layout snapshot messages, if the layout snapshot does

not override this value.

#### language-pack-folder

Valid Values: Folder path Default Value: ./messages

Changes Take Effect: After restart

Specifies the folder from which Pulse Collector reads localized message files to show layout errors in

the localized form.

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

# [Log] Section

#### all

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.

Default Value: stdout

Changes Take Effect: Immediately

Specifies the outputs to which Data Sourcer 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

**Note:** To ease the troubleshooting process, consider using unique names for log files that different applications generate.

#### 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.

#### segment

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.

Default Value: 10 MB

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

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 statserver 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.

Default Value: all

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 Deployment Guide or Framework Solution Control Interface Help 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

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

Default Value: %ObjectName% 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**

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

Default Value: %ObjectName% 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**

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

Default Value: %ObjectName% 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**

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

Default Value: %ObjectName% 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**

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

Default Value: %ObjectName% 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**

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

Default Value: %ObjectName% 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

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

Default Value: %ObjectName% 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

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

Default Value: %ObjectName% 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

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

Default Value: %ObjectName% 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

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

Default Value: %ObjectName% 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

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

Default Value: %ObjectName% 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**

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

Default Value: %ObjectName% 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**

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

Default Value: %ObjectName% 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

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

Default Value: %ObjectName% 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

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

Default Value: %ObjectName% 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**

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

Default Value: %ObjectName% 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**

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

Default Value: %ObjectName% 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**

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

Default Value: %ObjectName% 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**

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

Default Value: %ObjectName% 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**

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

Default Value: %ObjectName% 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**

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

Default Value: %ObjectName% 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

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

Default Value: %ObjectName% 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

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

Default Value: %ObjectName% 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**

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

Default Value: %ObjectName% 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**

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

Default Value: %ObjectName% 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**

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

Default Value: %ObjectName% 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**

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

Default Value: %ObjectName% 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

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

Default Value: %ObjectName% 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

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

Default Value: %ObjectName% 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

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

Default Value: %ObjectName% 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**Valid Values: Valid object name format string. For details, see the table at the bottom of this section.

Default Value: %ObjectName% 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**

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

Default Value: %ObjectName% 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**

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

Default Value: %ObjectName% 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

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

Default Value: %ObjectName%

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**

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

Default Value: %ObjectName% 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

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

Default Value: %ObjectName% 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

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

Default Value: %ObjectName% 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**

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

Default Value: %ObjectName% Changes Take Effect: After restart

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

#### Workbin

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

Default Value: %ObjectName% 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

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

Default Value: %ObjectName% 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, 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><li>%EmployeeID:10%</li><li>%EmployeeID:L10%</li></ul>	Both specify 10 characters of property EmployeeID from the left side.
<ul><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.
• %DBID:R4%	Specifies 4 characters of property DBID from the right side.
• %DBID:R04%	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	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 in Pulse Collector.
	ObjectID	Notes:  • This is the typically the configuration layer DBID, but

Object Type	Property	Description
		for some types of objects (for example, Campaign Group, Campaign Calling List) this is a composite 64-bit ID.
		<ul> <li>The composite 64-bit ID is an unsigned 64-bit number with the following composition:</li> </ul>
		<ul> <li>higher 32 bits: DBID of Campaign</li> </ul>
		<ul> <li>lower 32 bits: DBID of Calling List or Agent/Place group</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.
Campaign Group	CampaignDBID	Specifies the DBID of the Campaign object.
Campaign Group	GroupDBID	Specifies the DBID of the group object.

Object Type	Property	Description
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

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

Default Value: Warning

Changes Take Effect: After restart

Determines minimum log level for snapshot message that is written to 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 Pulse user interface. If the set frequency, however, is greater than the value of this option, 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 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 Pulse user interface. If the set frequency, however, is less than the value of this option, Pulse uses the value of this option instead.

#### snapshot-log-level

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

Default Value: Info

Changes Take Effect: After restart

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

# [parallel-processing] Section

## snapshot-builder-worker-thread-count

Valid Values: 1-128 Default Value: 1

Changes Take Effect: After restart

Defines the number of concurrent threads used to build snapshots.

# [scripting] Section

#### definition-script-execution-timeout

Valid Values: 1-900 Default Value: 45

Changes Take Effect: After restart

Time in seconds allowed for definition script execution.

#### formula-script-execution-timeout

Valid Values: 1-900 Default Value: 5

Changes Take Effect: After restart

Time in seconds allowed for single formula evaluation script execution.

## init-script-execution-timeout

Valid Values: 1-900 Default Value: 60

Changes Take Effect: After restart

Time in seconds allowed for initialization script execution.

#### js-lib-path

Valid Values: Valid folder paths Default Value: ./jslib/standard 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 ./

#### is-modules

Valid Values: Comma-separated list of JavaScript files Default Value: collector.js,cfglib.js,statlib.js,gts.js

Changes Take Effect: After restart

Comma-separated list of modules to preload into the scripting engine.

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

Valid Values: 0-100 Default Value: 3 Change Take Effect: After restart

Specifies the maximum allowed number of timeout expired errors during formula computation, after which, 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

Valid Values: yes, no Default Value: no

Changes Take Effect: After restart

Determines whether to force Pulse Collector to request all statistics through the StatServer New API

that uses the proper parameter set.

#### data-flow-check-interval

Default Value: 360 Valid Values: 5-3600

Changes Take Effect: After restart

Recommended Values: Positive integers that are less than the maximum notification interval value, either with reset-based notification using the time profile or time-based notification using the

notification interval parameter.

Note: Standard Pulse layouts use a 60 second notification interval.

Changes Take Effect: Immediately

How often, in seconds, Pulse Collector verifies that there is data flow from Stat Server (primary and backup), provided that Pulse Collector contains active report layouts and has a live connection to Stat Server.

#### data-flow-timeout

Default Value: 120 Valid Values: 5-86400

Changes Take Effect: After restart

Recommended Values: Positive integers that are greater than the value that you specify for data-flow-check-interval and less than two times of the maximum notification interval value, either with reset-based notification using time profile or time-based notification using notification interval parameter.

**Note:** Standard Pulse layouts use a 60 second notification interval.

Changes Take Effect: Immediately

Time, in seconds, that is acceptable to suspend the transfer of data from Stat Server (primary or backup), provided that Pulse Collector contains active report layouts and has a live connection to Stat Server. The timer starts upon the last successful data transfer.

#### data-source-choice-strategy

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

**Note:** All values are case-insensitive. Default Value: PrimaryRunMode Changes Take Effect: After restart

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

• PrimaryRunMode—Pulse Collector uses the StatServer running in the primary mode. If both Stat Servers appear to be backup, Pulse Collector attempts the next strategy.

- LastGood—Pulse Collector uses the last good StatServer if available. Otherwise, Pulse Collector attempts the next strategy.
- FirstAvailable—Pulse Collector uses the Primary StatServer if available. If uses the Primary StatServer is unavailable, Pulse Collector uses the Backup StatServer. Otherwise, Pulse Collector attempts the next strategy.
- MostUpToDate—Pulse Collector uses StatServer that sent statistic data with most recent Server Time.
   Otherwise, Pulse Collector attempts the next strategy.
- PrimaryInCME—Pulse Collector always uses the Primary StatServer.

#### statserver-batch-size

Valid Values: 1-10000 Default Value: 500

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 Pulse Collector servers. If Stat Server disconnects Pulse Collector when it is opening statistics with error message Client too slow, decrease value of this option.

#### statserver-profiles-timeout

Valid Values: 1-86400 Default Value: 600

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, Pulse Collector closes the current connection to StatServer and attempts to reconnect.

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

Valid Values: yes, no Default Value: 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

Valid Values: true, false Default Value: false

Changes Take Effect: Immediately

Determines whether to enable Pulse Collector to log verbose messages about the objects for which it

requests statistics.

# [transport-gpb-out] Section

## output-file-ext

Valid Values: Valid file extensions for your operating system

Default Value: gpb

Changes Take Effect: After restart

Specifies the file extension for the full output file format.

#### output-file-mode Valid Values: 0-0777 Default Value: 0664

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

Valid Values: Valid folder paths

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

Changes Take Effect: After restart

Specifies the path in which Pulse Collector writes output files. If you specify a folder that does not

exist, Pulse Collector creates it for you. **Note:** Relative file paths must begin with ./

#### transport-type

Default Value: file Valid Values: file

Changes Take Effect: After restart Specifies the transport output type.