

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 Collector

Release Notes 9.0.x

Table of Contents

Genesys Pulse Collector 9.0.x Release Note	3
Known Issues and Recommendations	6
Release 9.0.0	14
9.0.010.02	15
9.0.009.00	17
9.0.008.03	19
9.0.007.07	21
9.0.007.03	23
9.0.007.00	24
9.0.006.04	27
9.0.006.01	29
9.0.005.00	31
9.0.004.01	33
9.0.003.03	35
9.0.003.02	37
9.0.001.04	39
9.0.001.03	41
9.0.001.02	43
9.0.000.08	47
9.0.000.04	49

Genesys Pulse Collector 9.0.x Release Note

9 X Genesys Pulse Collector is part of 9.x starting in 9.0.000.04.

This Release Note applies to all 9.0.x releases of Genesys Pulse Collector. Links in the Available Releases section enable you to access information regarding a specific release.

For information about 8.5.x releases of Genesys Pulse Collector, see the 8.5 Release Note (Cumulative).

Available Releases

Releases are listed by version number rather than in date order. For this reason, a recent release may be listed after earlier releases, if the version number is lower. Except when otherwise noted in the information for a specific release, each release includes all of the features and corrections that were introduced for the applicable operating system at earlier dates, regardless of the version numbering.

The operating systems available for use with each component release are listed in the table at a high level only. For more detailed information about the supported operating environments, including requirements, supported versions, and any conditions or limitations, see the Genesys Pulse page in the Genesys Supported Operating Environment Reference.

You can find Release Notes for particular releases of Genesys Pulse Collector at the following links:

Release 9.0.0:

Release	Release Date	Release Type	Restriction	s AIX	Linux	Solaris	Windows
9.0.011.04	08/14/25	Update			Χ		X
9.0.010.02	01/31/25	General			X		X
9.0.009.00	09/27/24	General			X		X
9.0.008.03	11/07/23	Update			Χ		X
9.0.007.07	02/21/23	Update			Χ		X
9.0.007.03	02/22/22	Update			Χ		X
9.0.007.00	12/22/21	Update			Χ		X
9.0.006.04	04/30/21	Update			Χ		X
9.0.006.01	08/24/20	General			Χ		X
9.0.005.00	05/26/20	General			Χ		X
9.0.004.01	03/06/20	General			Χ		Χ
9.0.003.03	08/19/19	Hot Fix			Χ		Χ

Release	Release Date	Release Type	Restriction	s AIX	Linux	Solaris	Windows
9.0.003.02	06/28/19	Update			Χ		X
9.0.001.04	04/26/19	Hot Fix			Χ		X
9.0.001.03	02/19/19	Update			Χ		X
9.0.001.02	11/14/18	General			Χ		X
9.0.000.08	06/25/18	General			Χ		Χ
9.0.000.04	05/29/18	General			X		X

Discontinued Support

This section documents features that are no longer supported in this software. This cumulative list is in release-number order with the most recently discontinued features at the top of the list. For more information on discontinued support for operating environments and databases, see the Discontinued Support page in the Genesys Supported Operating Environment Reference.

There are no discontinued items for this product.

Known Issues

You can find a cumulative list of the Known Issues and Recommendations for all 9.0.x releases of Genesys Pulse Collector, including the issues that are specific to Localized (International) releases, at the following links:

- Known Issues and Recommendations
- Internationalization Issues

Related Resources

For additional information about Genesys Pulse Collector, see the following documentation:

- The documentation related to this software is available from the Genesys Pulse page.
- The Genesys Pulse Deployment Guide provides details about installing and configuring Genesys Pulse.
- The Genesys Pulse Help provides details about using Genesys Pulse.
- The Genesys Pulse page in the *Genesys Supported Operating Environment Reference* provides detailed information about the supported operating environments, including requirements, supported versions, and any conditions or limitations for Genesys Pulse components.

Release Notes for other Genesys components are available here.

Known Issues and Recommendations

Genesys Pulse Collector

The Known Issues and Recommendations section is a cumulative list for all 9.0.x releases of Genesys Pulse Collector. This section provides the latest information on known issues and recommendations associated with this product. It includes information on when individual items were found and, if applicable, corrected. The Resolved Issues section for each release describes the corrections and may list additional issues that were corrected without first being documented as Known Issues.

See also Internationalization Issues.

Pulse Collector ignores DBMS port specified in DAP and always uses the default port instead.

ID: **WBRT-18604** Found In: **9.0.009.00** Fixed In:

The default maximum number of channels allowed on a connection has been lowered from 65535 to 2047 in RabbitMQ 3.7.5 (see https://www.rabbitmq.com/changelog.html). The change might cause the following error in the Genesys Pulse Collector log:

```
ERROR (1368) RabbitMQSnapshotTransport: Connection attempt failed: Broker disconnected: "a socket error occurred"
WARNING (1368) RabbitMQSnapshotTransport: Failed to connect to broker
```

The error is also visible in the RabbitMQ log, with more details:

```
closing AMQP connection 0.12919.3 (10.0.1.10:37938 -> 10.0.1.11:5672): failed to negotiate connection parameters: negotiated channel_max = 0 (no limit) is higher than the maximum allowed value (128)
```

To correct this issue, find the **channel_max** parameter in the rabbitmq.conf:

```
#Set the max permissible number of channels per connection.
#0 means "no limit".
#
channel_max = 128
```

and change its value to 0 (zero). Restart RabbitMQ after that.

ID: WBRT-11395 Found In: RabbitMQ 3.7.5 Fixed In:

Pulse Collector may crash in environments where Widgets with formulas are used. In case of unexpected Pulse Collector crash and V8: Fatal Error: at Cannot grow ExternalPointerTable past its

maximum capacity: Allocation failed - process out of memory message in the log, it's recommended to downgrade Pulse Collector back to 9.0.007.07 along with enabling the following option in Pulse application(s): [pulse]\disable_strict_collector_version_check = true

ID: WBRT-18399 Found In: 9.0.008.03 Fixed In: 9.0.009.00

The Stat Server Data Provider service does not reconnect to Stat Server correctly, which may result in Advanced Alerts being sent continuously or missed in case of new Advanced Alerts for existing widgets configured after reconnection (WBRT-17541, WBRT-15980).

Workaround: Restart the Stat Server Data Provider service.

ID: **WBRT-17541** Found In: **9.0.007.07** Fixed In:

The Advanced Alerting feature does not work for widgets with Tenant objects.

ID: WBRT-17520 Found In: 9.0.007.07 Fixed In: 9.0.008.03

Pulse Collector may crash when using the toLocaleString(), toLocaleDateString(), and toLocaleTimeString() methods of the **Date** built-in object in formulas.

ID: WBRT-17435 Found In: 9.0.007.07 Fixed In: 9.0.007.07

The **aeron_driver_service.ini** and **aeron_driver_service.exe** files required for the Aeron Media Driver service installation are missing in the IP for the Windows platform.

ID: **WBRT-16624** Found In: **9.0.007.00** Fixed In: **9.0.007.07**

Pulse Collector can stop while creating snapshot file for a layout in scenarios where:

- Objects are being selected based on agent, place, or DN group.
- The content of the group has changed and Pulse Collector is processing layout changes at the same time as it is building the snapshot.

If you encounter this issue after upgrading to Pulse 9.0.007, you can continue to use the 9.0.007 release of Pulse (which includes critical security updates related to Log4j) with an earlier release of Pulse Collector 9.0.x. To enable this workaround, perform the following steps:

- 1. On your Pulse applications, add the option **disable_strict_collector_version_check=true** in the **[pulse]** section.
- On your Pulse Collector applications, set the option disabled = yes in the [transport-aeron] section.
 This disables Quick Updates, which is necessary because such a combination of Pulse and Pulse
 Collector releases can cause Quick Updates to not work correctly, which can cause Pulse or Pulse
 Collector to stop.
- 3. Restore the release of Pulse Collector you had previously installed, or install release 9.0.006.04 or earlier.

ID: **WBRT-16444** Found In: **9.0.007.00** Fixed In: **9.0.007.04**

Genesys Pulse Collector does not calculate statistics for a Campaign Group if it was changed from an Agent Group to a Place Group or vice-versa after the widget was created.

Workaround: Restart Genesys Pulse Collector.

ID: **WBRT-15104** Found In: **9.0.006.04** Fixed In:

The Advanced Alerts feature does not work for the statistics of AverageTime and CurrentAverageTime categories.

Workaround: Change the Display Format of problematic statistic to Number.

- 1. In **Template Management**, if the template is **OOB**, clone it; otherwise **Edit** the template.
- 2. Clone **problematic statistic** and change its **Display Format** to **Number**, then click **Save** to save the template.
- 3. If it is not a cloned OOB template then propagate the changes to widgets; otherwise, you need to create new widgets from the new template.
- 4. Configure the advanced alerts for statistics with **Display Format Number**.

ID: **WBRT-15657** Found In: **9.0.006.03** Fixed In: **9.0.006.05**

Genesys Pulse Collector might terminate unexpectedly if the Aeron driver folder is on the network share. Genesys strongly recommends to put the Aeron driver folder on the local drive.

ID: WBRT-14097 Found In: 9.0.005.00 Fixed In: Will Not Fix

Changes in [log]/segment and [log]/expire options are not applied immediately.

ID: WBRT-14334 Found In: 9.0.003.03 Fixed In: 9.0.006.01

Genesys Pulse Collector might terminate unexpectedly while writing to the log when the database thread is enabled.

ID: **WBRT-14110** Found In: **9.0.001.02** Fixed In: **9.0.006.01**

Genesys Pulse Collector resets the ERROR value to N/A after its connection to Stat Server is lost and not restored yet.

ID: **WBRT-11703** Found In: **9.0.001.02** Fixed In: **9.0.003.02**

The new Date() expression in the JavaScript formula returns an object with incorrect time when DST is effective.

Workaround: Turn off the ICU-based time zone detection in the Chrome V8 scripting engine by setting the Genesys Pulse Collector option **scripting/v8-flags**=--no-icu-timezone-data and

restart Genesys Pulse Collector.

ID: **WBRT-14582** Found In: **9.0.000.04** Fixed In:

When the connection to the database is lost, Genesys Pulse Collector does not indicate the correct status of the connection with DB Server in the status information provided in the heartbeat file.

ID: **WBRT-12150** Found In: **9.0.000.04** Fixed In: **9.0.003.02**

In the status information provided in the heartbeat file, Genesys Pulse Collector does not correctly indicate when it is connected to a backup Configuration Server.

ID: WBRT-12147 Found In: 9.0.000.04 Fixed In: 9.0.003.02

Genesys Pulse Collector, deployed on Linux, does not connect to MS SQL Server database when using an embedded DB Server.

ID: WBRT-11408 Found In: 9.0.000.04 Fixed In: 9.0.001.04

Genesys Pulse Collector heartbeat file might contain incorrect status of the connection with Stat Server if the database connection is not established.

ID: WBRT-10612 Found In: 9.0.000.04 Fixed In: 9.0.000.08

Genesys Pulse Collector does not support slashes, backslashes, and any other symbols in its file names, because it might be used to compose the name of the heartbeat file.

ID: **WBRT-10585** Found In: **9.0.000.04** Fixed In:

StatServerDataProvider only monitors members of Agents and Places groups. Monitoring members of other group types is not supported.

ID: **WBRT-10349** Found In: **9.0.000.04** Fixed In:

Genesys Pulse Collector does not display statistics for the campaign group after changes in the relegated agent or place group.

Workaround: Restart Genesys Pulse Collector.

ID: WBRT-14894 Found In: 8.5.108.04 Fixed In: 9.0.006.04

Genesys Pulse Collector might terminate unexpectedly if String.localCompare() is used in the formula.

ID: **WBRT-13098** Found In: **8.5.107.04** Fixed In: **9.0.007.07**

Oracle 12 clients are not supported.

Workaround: If you are using Oracle 12c database with Genesys Pulse Collector configured with embedded DB Server, make sure that you install Oracle 11.2 client on the host that runs Genesys Pulse Collector.

ID: WBRT-8153 Found In: 8.5.106.02 Fixed In: 9.0.001.02

Genesys Pulse Collector may keep updating heartbeat file when DBMS is down and collector-db is added to heartbeat-success-condition option in the [heartbeat] section.

Workaround: Add db-poller to the option value.

ID: **WBRT-8241** Found In: **8.5.105.03** Fixed In:

Quick updates might not work for changes-based statistics with Group By columns. These statistics might display incorrect data until the next full snapshot is received.

ID: **WBRT-12405** Found In: **8.5.105.01** Fixed In:

Genesys Pulse Collector does not process changes in the GroupBy statistics definitions (configured in Stat Server options).

Workaround: Restart Genesys Pulse Collector.

ID: **WBRT-9168** Found In: **8.5.105.01** Fixed In:

When you use a GroupBy expression that involves user data that is changed during a call, that call is counted in the group with the old value (or no value) AND in the group with the new value. You might see the Total Number of Calls without GroupBy that is less than the value of the sum of all numbers from all Groups in GroupBy. This is expected behavior from Stat Server.

Workaround: Add filters to the statistic to filter out all the calls that do not have user data. For example given GroupBy enabled stat type:

[GroupBy1]
Category=TotalNumber
GroupBy=GetString(UserData,"UserData1")
GroupByColumns=UserData1
MainMask=CallInbound
Objects=Agent
Subject=DNAction

You can add a filter like the following:

{code}
UserDatal=PairExists("UserDatal","*")
{code}

This filters calls until they have UserData1 attached, which prevents double counting each call with the N/A userdata (no userdata) and the UserData1 user data key.

ID: **WBRT-7702** Found In: **8.5.105.01** Fixed In:

Widgets may display N/A values immediately after startup of Genesys Pulse Collector or a switchover of Stat Servers for at least one widget refresh period, when notification pausing from the backup Stat Server is enabled and the Stat Server supports this feature.

ID: **WBRT-7670** Found In: **8.5.105.01** Fixed In:

Genesys Pulse Collector might not suspend notifications from the secondary Stat Server even if the **suspend-notifications-from-secondary-server** option is set to yes.

ID: **WBRT-13572** Found In: **8.5.104.08** Fixed In:

Genesys Pulse Collector might not stop immediately when it is in the state of waiting for the DB Server response. Genesys Pulse Collector stops normally when database request timeout expires. Standard database request timeout is 180 seconds.

ID: **WBRT-6691** Found In: **8.5.104.04** Fixed In:

Disabled agents remain in snapshots for widgets even when the Filter Out LoggedOut Agents option is enabled.

ID: WBRT-14531 Found In: 8.5.103.03 Fixed In: 9.0.006.04

Genesys Pulse Collector may write incorrect Configuration Server details to the log if the connection to Configuration Server was lost and Genesys Pulse Collector connected to another Configuration Server of an HA pair.

ID: **WBRT-12131** Found In: **8.5.103.03** Fixed In: **9.0.003.02**

Genesys Pulse Collector uses the short host name instead of a fully qualified domain name when reconnecting to Configuration Server.

ID: WBRT-12086 Found In: 8.5.103.03 Fixed In: 9.0.003.02

Genesys Pulse Collector terminates unexpectedly when the **parallel-processing/stat-data-processing-thread-pool-size** option is set to 0 (zero) and the **use-multiple-stat-data-processing-threads** option is set to yes.

ID: **WBRT-11671** Found In: **8.5.100.01** Fixed In: **9.0.003.02**

Genesys Pulse Collector might terminate unexpectedly while processing a layout based on Stat Server Virtual Agent Groups or containing statistics of the CurrentTargetState category if the **[statistic-request-handling]/optimize-statistic-requests** option is set to true or yes (default value).

Workaround: Set the **[statistic-request-handling]/optimize-statistic-requests** option to false or no (changes take effect after restart).

ID: **WBRT-13474** Found In: **8.5.000.15** Fixed In: **9.0.005.00**

Object status duration may be computed incorrectly, if Genesys Pulse Collector and Stat Server are running on the different hosts with non-synchronized system times. In order to achieve correct value, the system time on the Genesys Pulse Collector and Stat Server hosts need to be synchronized, then both Genesys Pulse Collector and Stat Server must be restarted.

ID: **WBRT-4926** Found In: **8.5.000.15** Fixed In:

When a connection to Stat Server is unavailable, Genesys Pulse may display incorrect values, such as 1.#IND, for some formula-based statistics, instead of ERROR or n/a.

ID: **WBRT-3560** Found In: **8.5.000.15** Fixed In:

Genesys Pulse Collector might fail to connect to Configuration Server if the name of the Configuration Server host is unresolvable from the Genesys Pulse Collector host right before Genesys Pulse Collector is started, even if it becomes resolvable after that.

ID: WBRT-13069, WBRT-8292 Found In: 8.5.000.15 Fixed In: 9.0.006.01

Formula-based statistics for Skills levels do not reflect skill-level changes made in the object properties.

ID: WBRT-12655 Found In: 8.5.000.15 Fixed In: 9.0.003.03

Genesys Pulse Collector is at risk of hanging or terminating unexpectedly because of race conditions related to logging.

ID: WBRT-12594 Found In: 8.5.000.15 Fixed In: 9.0.003.03

Genesys Pulse Collector incorrectly calculates formula-based statistics that contain the ERROR value along with valid values.

ID: **WBRT-11709** Found In: **8.5.000.15** Fixed In: **9.0.003.02**

Genesys Pulse Collector might terminate unexpectedly while processing incoming data for the following statistic:

[CurrentAgentGroupTargetState]
Category=CurrentTargetState
MainMask=*
Objects=GroupAgents
Subject=GroupStatus

ID: **WBRT-11586** Found In: **8.5.000.15** Fixed In: **9.0.003.02**

Internationalization Issues

Information in this section is included for international customers. Release numbers in the **Found In** and **Fixed In** fields refer to the English (US) release of Genesys Pulse Collector unless otherwise noted in the issue description.

There are no internationalization issues for this product.

Release 9.0.0

Genesys Pulse Collector Release Notes

You can find links to Release Notes for particular 9.0.0 releases of Genesys Pulse Collector, if available, in the tree menu on the left or in the list of Available Releases.

9.0.010.02

Genesys Pulse Collector Release Notes

9 Y Genesys Pulse Collector is part of 9.x starting in 9.0.000.04.

Release Date	Release Type	Restrictions	AIX	Linux	Mac	Solaris	Windows
01/31/25	General			Χ			Χ

What's New

This release contains the following new features and enhancements:

- Support for the following operating systems. See the Genesys Pulse page in the Genesys Supported Operating Environment Reference Guide for more detailed information and a list of all supported operating systems.
 - Red Hat Enterprise Linux 9 (WBRT-18393)
 - CentOS Linux 9 (WBRT-18393)
 - Microsoft Windows 2022 (WBRT-19137)
- Support for the following databases. See the Genesys Pulse page in the Genesys Supported Operating Environment Reference

Guide for more detailed information and a list of all supported databases. (WBRT-19163)

- MS SQL Server 2022
- Oracle 23c
- PostgreSQL 17.x
- The following third-party components are updated to the latest versions (WBRT-19263, WBRT-18651):
 - Aeron 1.46.7
 - Boost 1.86.0

Helpful Links

Releases Info

- List of 9.0.x Releases
- 9.0.x Known Issues

Product Documentation

· Genesys Pulse Collector

Genesys Products

· List of Release Notes

- OpenSSL 3.0.15
- gRPC 1.68.0
- V8 12.7.224.20

Resolved Issues

This release contains no resolved issues.

Upgrade Notes

No special procedure is required to upgrade to release 9.0.010.02.

9.0.009.00

Genesys Pulse Collector Release Notes

9 X Genesys Pulse Collector is part of 9.x starting in 9.0.000.04.

Release Date	Release Type	Restrictions	AIX	Linux	Mac	Solaris	Windows	
09/27/24	General			X			X	

What's New

This release contains the following new features and enhancements:

- Pulse Collector supports OpenSSL 3.0.14. (WBRT-18892)
- Pulse Collector supports PostgreSQL 16. (WBRT-18402)

Helpful Links

Releases Info

- List of 9.0.x Releases
- 9.0.x Known Issues

Product Documentation

Genesys Pulse Collector

Genesys Products

• List of Release Notes

Resolved Issues

This release contains the following resolved issues:

Pulse Collector no longer includes passwords in log files even when they are specified in the section with an invalid name. (WBRT-18589)

Pulse Collector no longer crashes due to V8: Fatal Error: at Cannot grow ExternalPointerTable past its maximum capacity: Allocation failed - process out of memory. (WBRT-18399)

Upgrade Notes

No special procedure is required to upgrade to release 9.0.009.00.

9.0.008.03

Genesys Pulse Collector Release Notes

9 X Genesys Pulse Collector is part of 9.x starting in 9.0.000.04.

Release Date	Release Type	Restrictions	AIX	Linux	Mac	Solaris	Windows	
11/07/23	General			X			Χ	

What's New

This release contains the following new features and enhancements:

- **Breaking changes:** Starting with release 9.0.008.03, StatServer Data Provider and Formula Processor require configuration files in YAML format. You can convert existing configuration files from INI to YAML format using microservices/FormulaProcessor/contrib/cfg2yaml.py or microservices/StatServerDataProvider/contrib/cfg2yaml.py script. (WBRT-17447)
- Starting with release 9.0.008.00, Genesys Pulse Collector does not run on the CentOS Linux 7 operating system, or on Red Hat Enterprise Linux 7 and its clones. (WBRT-18265)
- The following 3rd party libraries are upgraded to their latest versions:
 - Aeron 1.41.3
 - Boost 1.82.0
 - gRPC 1.51.3
 - OpenSSL 1.1.1k
 - RabbitMQ C 0.13.0
 - · Google Protocol Buffers 3.23.4
 - Chrome v8 11.5.150.16

Helpful Links

Releases Info

- List of 9.0.x Releases
- 9.0.x Known Issues

Product Documentation

Genesys Pulse Collector

Genesys Products

· List of Release Notes

• lib 1.2.13 (WBRT-17670)

Resolved Issues

This release contains the following resolved issues:

Various bug fixes and stability improvements have been made for StatServerDataProvider and FormulaProcessor. (WBRT-16743)

Upgrade Notes

No special procedure is required to upgrade to release 9.0.008.03.

9.0.007.07

Genesys Pulse Collector Release Notes

9 X Genesys Pulse Collector is part of 9.x starting in 9.0.000.04.

Release Date	Release Type	Restrictions	AIX	Linux	Mac	Solaris	Windows
02/21/23	Update			X			Χ

What's New

This release contains the following new features and enhancements:

- The following 3rd party libraries are upgraded to their latest versions:
 - Boost 1.78.0
 - Chrome V8 10.3.174.18
 - OpenSSL 1.1.1m
 - Hiredis 1.1.0
 (WBRT-16549)

Helpful Links

Releases Info

- List of 9.0.x Releases
- 9.0.x Known Issues

Product Documentation

Genesys Pulse Collector

Genesys Products

• List of Release Notes

• This release includes improved support for data with national symbols. (WBRT-16083)

Resolved Issues

This release contains the following resolved issues:

Pulse Collector no longer crashes when using the toLocaleString(), toLocaleDateString(), and toLocaleTimeString() methods of the **Date** built-in object in formulas. (WBRT-17435)

The **aeron_driver_service.ini** and **aeron_driver_service.exe** files are now included in the IP for the Windows platform. (WBRT-16624)

Pulse Collector no longer crashes when using the localCompare() method of the **String** built-in object in formulas. (WBRT-13098)

Upgrade Notes

No special procedure is required to upgrade to release 9.0.007.07.

9.0.007.03

Genesys Pulse Collector Release Notes

9 Y Genesys Pulse Collector is part of 9.x starting in 9.0.000.04.

Release Date	Release Type	Restrictions	AIX	Linux	Mac	Solaris	Windows
02/22/22	Update			Χ			Χ

What's New

This release includes only resolved issues.

Resolved Issues

This release contains the following resolved issues:

Helpful Links

Releases Info

- List of 9.0.x Releases
- 9.0.x Known Issues

Product Documentation

· Genesys Pulse Collector

Genesys Products

List of Release Notes

Pulse Collector no longer stops when processing layout changes at the same time as it is building the snapshot. Previously in such scenarios, when objects were selected based on agent, place, or DN group, Pulse Collector sometimes stopped. (WBRT-16444, WBRT-16356)

Upgrade Notes

No special procedure is required to upgrade to release 9.0.007.03.

9.0.007.00

Genesys Pulse Collector Release Notes

9 X Genesys Pulse Collector is part of 9.x starting in 9.0.000.04.

Release Date	Release Type	Restrictions	AIX	Linux	Mac	Solaris	Windows	
12/22/21	Update			X			Χ	

What's New

This release contains the following new features and enhancements:

- A new option, min-notification-interval, in the [statistic-request-handling] section, enables you to limit the notification interval for time-based statistics. For more information, see Application Objects Options. (WBRT-15547)
- The Genesys Pulse Collector installation package for Linux now provides three executable variants, each of which uses a distinct memory allocator, as follows:
 - · collector.default uses standard glibc memory allocator
 - collector.jemalloc uses jemalloc memory allocator
 - collector.tcmalloc uses tcmalloc memory allocator

The cleanuptool executable is built only for the standard glibc memory allocator.

(WBRT-15467)

- Pulse Collector now enables the extended statistic value option by default. To support this change, additional scripting properties are available on Data.StatisticName. (WBRT-15922)
- Third-party libraries used in the Genesys Pulse Collector are updated to the following versions:
 - Aeron 1.35.1 (WBRT-16009)
 - Boost 1.76.0

Helpful Links

Releases Info

- List of 9.0.x Releases
- 9.0.x Known Issues

Product Documentation

Genesys Pulse

Genesys Products

· List of Release Notes

- Chrome V8 9.2.230.22
- lz4 1.9.3
- OpenSSL 1.1.1g (Linux), 1.1.1k (Windows)
- protobuf 3.17.3
- rabbitmq-c 0.11.0

To support this change, Genesys Pulse Collector now requires the OpenSSL 1.1 runtime libraries package from the Extra Packages for Enterprise Linux (EPEL) package repository on Red Hat Enterprise Linux 7. For more information, see Confirm Software Requirements.

(WBRT-15883)

Resolved Issues

This release contains the following resolved issues:

Pulse Collector now correctly processes data from Configuration Server when the data contains parameters with names represented by more than 255 bytes -- which could happen when the name contained national characters requiring more than 1 byte. Previously in such scenarios, Pulse Collector stopped. (WBRT-16353)

The Genesys Pulse Collector service now stops correctly when shut down through Solution Control Server (SCS). Previously, Pulse Collector sometimes crashed when stopping. (WBRT-16005)

Genesys Pulse Collector now correctly generates object names when national characters are used. Previously, Genesys Pulse Collector generated object names incorrectly when national characters were used in custom names, group by values, or in object name format options. (WBRT-15899)

Genesys Pulse Collector no longer stops when handling agent groups containing 32768 or more agents. (WBRT-15744)

Genesys Pulse Collector on Linux now automatically optimizes its memory usage in builds that use standard glibc memory allocator (collector.default) and jemalloc (collector.jemalloc). The build that uses temalloc allocator (collector.temalloc) does not support automatic memory optimization, because temalloc does not return memory pages back to the operating system. (WBRT-15432)

Upgrade Notes

Beginning with this release, Pulse Collector requires the OpenSSL 1.1 runtime libraries package. For more information, see Confirm Software Requirements.

No special procedure is required to upgrade to release 9.0.007.00.

9.0.006.04

Genesys Pulse Collector Release Notes

9 X Genesys Pulse Collector is part of 9.x starting in 9.0.000.04.

Release Date	Release Type	Restrictions	AIX	Linux	Mac	Solaris	Windows	
04/30/21	Update			X			Χ	

What's New

This release contains the following new features and enhancements:

 An automatic attempt to reopen failed statistics requests. This is particularly useful when there are delays between activating a new configuration object in the Genesys Pulse Collector and Stat Server.

The following new configuration option is introduced in the [statistic-request-handling] section to control the reopening behavior.

 max-stat-reopen-count Valid Values: 0-1000 Default Value: 5

Change takes effect: After restart

Specifies the number of attempts to reopen statistics after generally unrecoverable error. A timeout between reopen attempts is controlled by the existing configuration option [statistic-request-handling]/open-stat-retry-timeout.

(WBRT-14305)

- The following new configuration option is introduced in the **[configuration-monitoring]** section to allow direct requests for members of Virtual Agent Groups of all types (skill-based, status-based, combined) to Stat Server.
 - · always-get-vag-members-from-statserver

Helpful Links

Releases Info

- List of 9.0.x Releases
- 9.0.x Known Issues

Product Documentation

• Genesys Pulse

Genesys Products

List of Release Notes

Valid Values: yes, no Default Value: no

Change takes effect: After restart

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.

(WBRT-14997)

Resolved Issues

This release contains the following resolved issues:

Genesys Pulse Collector now properly handles Agent Group or Place Group changes, related to a Campaign Group. Previously, if an Agent Group (or a Place Group) was changed, statistics for the related Campaign Group were not displayed until Genesys Pulse Collector was restarted. (WBRT-14894)

Disabled agents are now excluded from snapshots for widgets if the **Filter Out LoggedOut Agents** is enabled for the ExtendedCurrentStatus statistic. Previously, disabled agents remained in snapshots in the Monitored status. (WBRT-14531)

Upgrade Notes

No special procedure is required to upgrade to release 9.0.006.04.

9.0.006.01

Genesys Pulse Collector Release Notes

9 X Genesys Pulse Collector is part of 9.x starting in 9.0.000.04.

Release Date	Release Type	Restrictions	AIX	Linux	Solaris	Windows	
08/24/20	General			Χ		X	

What's New

This release contains the following new features and enhancements:

 Support for MS SQL Server 2019 Cluster. See the Genesys Pulse page in the Genesys Supported Operating Environment Reference Guide for more detailed information and a list of all supported databases. (WBRT-14065)

Helpful Links

Releases Info

- List of 9.0.x Releases
- 9.0.x Known Issues

Product Documentation

Genesys Pulse

Genesys Products

List of Release Notes

Resolved Issues

This release contains the following resolved issues:

Changes in [log]/**segment** and [log]/**expire** options are now applied immediately. Previously, restart of Genesys Pulse Collector was required for changes to take effect. (WBRT-14334)

Genesys Pulse Collector no longer terminates unexpectedly while writing to the log when the database thread is enabled. (WBRT-14110)

Genesys Pulse Collector now correctly reconnects to Configuration Server after its IP address was temporarily unreachable. (WBRT-13069, WBRT-8292)

Upgrade Notes

No special procedure is required to upgrade to release 9.0.006.01.

9.0.005.00

Genesys Pulse Collector Release Notes

9 X Genesys Pulse Collector is part of 9.x starting in 9.0.000.04.

Release Date	Release Type	Restrictions	AIX	Linux	Solaris	Windows	
05/26/20	General			Χ		Χ	

What's New

This release contains the following new features and enhancements:

- Support for the following databases. See the Genesys Pulse page in the Genesys Supported Operating Environment Reference Guide for more detailed information and a list of all supported databases.
 - MS SQL Server 2019 (WBRT-13092)
 - Oracle 19c (WBRT-13090)
 - Oracle 19c RAC (WBRT-14073)
 - PostgreSQL 12.x (WBRT-14217)

Helpful Links

Releases Info

- List of 9.0.x Releases
- 9.0.x Known Issues

Product Documentation

Genesys Pulse

Genesys Products

List of Release Notes

Resolved Issues

This release contains the following resolved issues:

Genesys Pulse Collector no longer terminates unexpectedly in the request optimization mode (turned on by default), when there is an Agent layout based on the Stat Server Virtual Agent Group or

statistic of the CurrentTargetState category is used in the same layout. (WBRT-13474)

Upgrade Notes

No special procedure is required to upgrade to release 9.0.005.00.

9.0.004.01

Genesys Pulse Collector Release Notes

9 X Genesys Pulse Collector is part of 9.x starting in 9.0.000.04.

Release Date	Release Type	Restrictions	AIX	Linux	Solaris	Windows	
03/06/20	General			Χ		X	

What's New

This version was first released as an Update on 12/20/19.

This release contains the following new features and enhancements:

- Content of the Genesys Pulse Collector heartbeat file was enhanced with Stat Server utilization details:
 - Total Statistic Count total number of statistic requests that are either already opened, or pending, or not sent to Stat Server yet.
 - Opened Statistic Count the number of requests that are successfully opened.
 - Failed Statistic Count the number of requests that failed.

(WBRT-12772)

- Support for the following operating systems. See the Genesys Pulse page in the Genesys Supported Operating Environment Reference Guide for more detailed information and a list of all supported operating systems.
 - Red Hat Enterprise Linux 8 (WBRT-13128)
 - CentOS Linux 8 (WBRT-13153)

Helpful Links

Releases Info

- List of 9.0.x Releases
- 9.0.x Known Issues

Product Documentation

Genesys Pulse Collector

Genesys Products

· List of Release Notes

Resolved Issues

This release contains the following resolved issue:

Genesys Pulse Collector now allows up to 4999 characters in the VAG script. Previously, Genesys Pulse Collector terminated unexpectedly if the VAG script was more than 511 characters in length. (WBRT-12667)

Upgrade Notes

No special procedure is required to upgrade to release 9.0.004.01.

9.0.003.03

Genesys Pulse Collector Release Notes

9 Y Genesys Pulse Collector is part of 9.x starting in 9.0.000.04.

Release Date	Release Type	Restrictions	AIX	Linux	Solaris	Windows	
08/19/19	Hot Fix			Χ		X	

What's New

This release includes only resolved issues.

Resolved Issues

This release contains the following resolved issues:

Helpful Links

Releases Info

- List of 9.0.x Releases
- 9.0.x Known Issues

Product Documentation

· Genesys Pulse Collector

Genesys Products

List of Release Notes

Pulse Collector now correctly reflects changes in agent skill levels in the formula-based statistics (Skill.Level). Previously, snapshots did not reflect skill-level updates that were made in the object properties. (WBRT-12655)

Pulse Collector now uses the multithreaded versions of internal libraries. Previously, Pulse Collector was at risk of hanging or terminating unexpectedly because of race conditions related to logging. (WBRT-12594)

Upgrade Notes

No special procedure is required to upgrade to release 9.0.003.03.

9.0.003.02

Genesys Pulse Collector Release Notes

9 X Genesys Pulse Collector is part of 9.x starting in 9.0.000.04.

Release Date	Release Type	Restrictions	AIX	Linux	Solaris	Windows	
06/28/19	Update			Χ		X	

What's New

This release contains the following new features and enhancements:

- Support for the following databases. See the Genesys Pulse page in the Genesys Supported Operating Environment Reference Guide for more detailed information and a list of all supported databases.
 - MS SQL Server 2017
 - Oracle 18c and Oracle 18c RAC (WBRT-12225, WBRT-12222)

Helpful Links

Releases Info

- List of 9.0.x Releases
- 9.0.x Known Issues

Product Documentation

Genesys Pulse Collector

Genesys Products

• List of Release Notes

Resolved Issues

This release contains the following resolved issues:

Genesys Pulse Collector now correctly indicates the status of the connection with DB Server in the status information provided in the heartbeat file. (WBRT-12150)

Genesys Pulse Collector now correctly indicates primary or backup Configuration Server in the status

information provided in the heartbeat file. (WBRT-12147)

Genesys Pulse Collector now writes correct Configuration Server details to the log if the connection to Configuration Server was lost and Genesys Pulse Collector connected to another Configuration Server of the HA pair. (WBRT-12131)

Upgrade Notes

No special procedure is required to upgrade to release 9.0.003.02.

9.0.001.04

Genesys Pulse Collector Release Notes

9 X Genesys Pulse Collector is part of 9.x starting in 9.0.000.04.

Release Date	Release Type	Restrictions	AIX	Linux	Solaris	Windows	
04/26/19	Hot Fix			Χ		Χ	

What's New

This release contains the following new feature and enhancement:

 Genesys Pulse Collector supports secure connection with Message Server. (WBRT-11536)

Helpful Links

Releases Info

- List of 9.0.x Releases
- 9.0.x Known Issues

Product Documentation

Genesys Pulse Collector

Genesys Products

List of Release Notes

Resolved Issues

This release contains the following resolved issues:

Genesys Pulse Collector no longer uses the short host name instead of a fully qualified domain name when reconnecting to Configuration Server. (WBRT-12086)

Genesys Pulse Collector now correctly reflects computational errors for formula-based statistics that contain the ERROR value along with valid values. (WBRT-11709)

Genesys Pulse Collector no longer resets the ERROR value for statistics in Widgets to N/A. Previously, Genesys Pulse Collector changed the ERROR value to N/A for the period of time when there was no connection to Stat Server. (WBRT-11703)

Genesys Pulse Collector no longer terminates unexpectedly when the **parallel-processing/stat-data-processing-thread-pool-size** option is set to 0 (zero) and the **use-multiple-stat-data-processing-threads** option is set to yes. (WBRT-11671)

Genesys Pulse Collector no longer terminates unexpectedly while processing incoming data for the following statistic:

[CurrentAgentGroupTargetState]
Category=CurrentTargetState
MainMask=*
Objects=GroupAgents
Subject=GroupStatus

(WBRT-11586)

Genesys Pulse Collector deployments on Linux now connect successfully to MS SQL Server database when using an embedded DB Server. (WBRT-11408)

Upgrade Notes

No special procedure is required to upgrade to release 9.0.001.04.

9.0.001.03

Genesys Pulse Collector Release Notes

9 X Genesys Pulse Collector is part of 9.x starting in 9.0.000.04.

Release Date	Release Type	Restrictions	AIX	Linux	Solaris	Windows	
02/19/19	Update			Χ		X	

What's New

This release includes only resolved issues.

Helpful Links

Releases Info

- List of 9.0.x Releases
- 9.0.x Known Issues

Product Documentation

• Genesys Pulse Collector

Resolved Issues Genesys Products

This release contains the following resolved issues:

• List of Release Notes

Now the interval granularity feature works properly in the filesystem cleanup utility. (WBRT-11846)

The filesystem cleanup utility no longer terminates unexpectedly when processing large amounts of directories and files. (WBRT-11672)

Upgrade Notes

No special procedure is required to upgrade to release 9.0.001.03.

9.0.001.02

Genesys Pulse Collector Release Notes

9 X Genesys Pulse Collector is part of 9.x starting in 9.0.000.04.

Release Date	Release Type	Restrictions	AIX	Linux	Solaris	Windows
11/14/18	General			Χ		Χ

What's New

This release contains the following new features and enhancements:

- Genesys Pulse Collector now supports adding a default insensitivity value to statistic requests. The insensitivity value sets a minimum threshold for the degree of change in the statistic value before a data change notification will be sent. Using even small insensitivity values (for example, a value of 1) might help to decrease traffic between Stat Server and Genesys Pulse Collector significantly in data-intensive deployments. The following new options in the [statistic-request-handling] section are intended to control of adding the default insensitivity:
 - · default-insensitivity-percentage

Valid Values: 0-10000 Default Value: 0

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

Valid Values: 0-1000000

Default Value: 0

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

Helpful Links

Releases Info

- List of 9.0.x Releases
- 9.0.x Known Issues

Product Documentation

Genesys Pulse Collector

Genesys Products

List of Release Notes

statistic requests. The default value of θ (zero) means no insensitivity value will be added.

• For StatServer Data Provider and Formula Processor the following new configuration options are added:

AeronPublisher.driver timeout

Valid Values: Any positive integer

Default Value: 2000

Change takes effect: After restart

The amount of time, in milliseconds, that the publisher waits until it determines that the Aeron driver is unavailable.

AeronSubscriber.driver_timeout

Valid Values: Any positive integer

Default Value: 2000

Change takes effect: After restart

The amount of time, in milliseconds, that the subscriber waits until it determines that the Aeron driver is unavailable.

- Genesys Pulse Collector now preserves the last available data in the layout when disconnected from Stat Server. Inaccurate data might be shown until all data is refreshed.
- Genesys Pulse Collector configured with an embedded DB Server supports Oracle 12c and Oracle 12c RAC.
- Genesys Pulse Collector now supports a new configuration section, **[tags]**. Any options configured in the **[tags]** section are preserved as is and not checked in any way.
- · Aeron transport is available on Windows.
- Genesys Pulse Collector now supports running Formula Processor and StatServer Data Provider as a Windows service, with the following new command line options:
 - --install[=INSTANCE NAME]

Creates a Windows service for the microservice. If an instance name is not specified, then the name of the service is ExecutableName. If the instance name is provided, then the name of the service is ExecutableName#<INSTANCE_NAME>. If additional command line options are specified, they will be used to run the service.

--remove[=INSTANCE_NAME]

Removes a Windows service for the microservice. If an instance name is not specified, then the name of the service is ExecutableName. If the instance name is provided, then the name of the service is ExecutableName#<INSTANCE_NAME>.

In addition, the following command line options are changed

• --service[=INSTANCE_NAME]

The microservice is running as a system service

- On Windows, the option is added automatically during the creation of the service and should not be used directly by the user.
- On Linux, if the option is specified in the command line, then the microservice is running in the background.
- The short option -s is no longer supported.
- Support for CentOS Linux 7 operating system. See the Genesys Pulse page in the Genesys Supported
 Operating Environment Reference Guide for more detailed information and a list of all supported
 operating systems.

- Support for the following databases. See the Genesys Pulse page in the Genesys Supported Operating Environment Reference Guide for more detailed information and a list of all supported databases.
 - PostgreSQL 10
 - Oracle 12c R2
 - Oracle 12c R2 RAC

Resolved Issues

This release contains the following resolved issues:

Genesys Pulse Collector no longer creates two sets of database clients in the dbclients_next folder. The following new options in the **[embedded-dbserver]** section enable you to specify the location of Genesys DB client executables used with an embedded DB Server. Option names replicate corresponding option names of the standalone Genesys DB Server.

msql name

Valid Values: Any valid path

Default Value: empty

Change takes effect: After restart

Specifies the path to the Genesys DB client executable for Microsoft SQL Server. If the option is not specified or has an empty value, the platform-specific default is used, which targets the platform-specific DB client executable located under path ./dbclients.

oracle_name

Valid Values: Any valid path

Default Value: empty

Change takes effect: After restart

Specified path to Genesys DB client executable for Oracle. If the option is not specified or has an empty value, the platform-specific default is used, which targets the platform-specific DB client executable located under path ./dbclients.

postgre_name

Valid Values: Any valid path

Default Value: empty

Change takes effect: After restart

Specified path to Genesys DB client executable for PostgreSQL. If the option is not specified or has an empty value, the platform-specific default is used, which targets the platform-specific DB client executable located under path ./dbclients.

(WBRT-11279)

The Genesys Pulse Collector installation file collector.lms has been updated. (WBRT-10933)

Upgrade Notes

No special procedure is required to upgrade to release 9.0.001.02.

9.0.000.08

Genesys Pulse Collector Release Notes

9 X Genesys Pulse Collector is part of 9.x starting in 9.0.000.04.

Release Date	Release Type	Restrictions	AIX	Linux	Solaris	Windows	
06/25/18	General			Χ		Χ	

What's New

This release includes only resolved issues.

Resolved Issues

This release contains the following resolved issues:

Genesys Pulse Collector now writes log messages about Stat Server errors with the ERROR log level. Previously, such messages had the TRACE log level. (WBRT-10733)

Helpful Links

Releases Info

- List of 9.0.x Releases
- 9.0.x Known Issues

Product Documentation

Genesys Pulse Collector

Genesys Products

· List of Release Notes

Now the --help command line option also displays the version of the microservice and versions of the components in use.

Added the new command line option --version. If this option is specified, the microservice displays its version and versions of used components and exits.

Now the content of each log file is pre-pended with the header that contains the version of the microservice and versions of the components in use. (WBRT-10615, WBRT-10614)

Now Genesys Pulse Collector heartbeat file contains the correct status of Stat Server connection when a database connection is not established. (WBRT-10612)

Upgrade Notes

No special procedure is required to upgrade to release 9.0.000.08.

9.0.000.04

Genesys Pulse Collector Release Notes

9 X This is the first 9.x release of **Genesys Pulse Collector**.

Release Date	Release Type	Restrictions	AIX	Linux	Solaris	Windows	
05/29/18	General			Χ		X	

What's New

This release contains the following new features and enhancements:

- New logic to update and format heartbeat files. The heartbeat file
 is always updated, thus the Genesys Pulse Collector configuration
 option heartbeat/heartbeat-success-condition is
 discontinued. The content of a heartbeat file is in JSON format.
 The heartbeat file includes the following information:
 - · Current timestamp.
 - Startup timestamp.
 - · Current uptime.
 - State of connection to Configuration Server.
 - · State of connections to Stat Servers.
 - · State of connections to DB Servers.
 - Snapshot writing status.

Example:

Helpful Links

Releases Info

- List of 9.0.x Releases
- 9.0.x Known Issues

Product Documentation

Genesys Pulse Collector

Genesys Products

· List of Release Notes

- New command line option -startup_heartbeat_file specifying which heartbeat file to use before Genesys Pulse Collector can read regular heartbeat configuration options from its Application. This option has only one parameter providing a path to the heartbeat file.
- Display format Status. This new display format is applicable only for statistics using Statistical Type ExtendedCurrentStatus. It allows to specify selections for the status (icon, name, media, duration) and to select current status statistics on any chart.
- · An option for statistics with display format Status to show "Do Not Disturb" status with its duration.
- An automatic reopening of statistics that failed to open due to recoverable Stat Server error. Stat Server release 8.5.108.15 or later is required.

New Genesys Pulse Collector configuration option in the **[statistic-request-handling]** section controls timeout for reopening statistics in such cases:

open-stat-retry-timeout

Valid Values: 1-3600

Default Value: 30

Change takes effect: After Restart

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

Resolved Issues

This release contains the following resolved issues:

Genesys Pulse Collector no longer terminates unexpectedly during the layout deactivation. (WBRT-10298)

Formulas, based on the G.GetSwitch() bundled function, now produce non-empty switch name when an agent is logged in on multiple DNs. Previously, the G.GetSwitch() definition in the gts.js file had to be updated manually. (WBRT-9718)

Now the default value of the **[statistic-request-handling]/always-use-statserver-newapi** option is yes. (WBRT-9598)

Upgrade Notes

No special procedure is required to upgrade to release 9.0.000.04.