Genesys Info Mart Deployment Guide

New in Release 8.5.0

5/5/2025

New in Release 8.5.0

Starting with release 8.5.014.14 on August 30, 2019, Genesys Info Mart is part of 9.0.

This page highlights new or changed functionality that was introduced in Genesys Info Mart 8.5.0 since release 8.5.001. See New in Release 8.5.1 for information about subsequent changes introduced in Genesys Info Mart 8.5.1 releases.

For related information about Info Mart database schema changes, see the "New in Release 8.5.0" and "Summary of Info Mart Schema Changes" pages in the *Genesys Info Mart Physical Data Model* (for Microsoft SQL Server, Oracle, or PostgreSQL, respectively). See the short video on New in 8.5.x Releases to learn how to view summary information about schema changes.

New in Release 8.5.016.04

> ### Important
> Genesys Info Mart 8.5.016.04 requires Interaction Concentrator (ICON) 8.1.100.36 or higher. To enable all of the functionality provided in this release, Genesys Info Mart requires Interaction Concentrator release 8.1.514.47 or higher.

Release 8.5.016.04 introduces the following new features and functionality:

- **Enhancements for multimedia deployments with Interaction Server Cluster** — A number of processing changes support a wider range of topologies for deployments with Interaction Server Cluster, and improve agent state reporting in these deployments:

  - Genesys Info Mart requirements for the value of the ICON **role** option have been relaxed. Specifically, Genesys Info Mart no longer requires that the gcc,gls,gud values occur together, and Genesys Info Mart now supports scenarios where the ICON application is configured without the gls role. In scenarios where each Interaction Server in a cluster is connected to a separate ICON (or ICON HA pair), this change enables you to configure only one of the ICONs (or ICON HA pairs) to have the gls role, and thus meet Genesys Info Mart topology requirements to have only one of the ICONs (or ICON HA pairs) collect data about agent states and agent login sessions. For more information and related links, see Interaction Concentrator Topologies.

  - Processing of resource state reason data in Interaction Server Cluster environments has been improved. For more details, see the Genesys Info Mart 8.5.016.04 release note.

  - A new configuration option, populate-sm-busy-from-mm-ixns, in the **[gim-etl-populate]** section, supports a topology that offers improved agent state reporting, where each ICON connects directly to an individual Interaction Server in the cluster, instead of to the proxy, and where only one ICON (or ICON HA pair) is configured to write agent state information (in other words, only one ICON or ICON HA pair has the gls role).
    In this scenario, the ICONs (or ICON HA pairs) that do not have the gls role write interaction data when the respective Interaction Server to which the ICON is connected handles an

interaction, but that ICON will not provide BUSY states. Setting **populate-sm-busy-from-mm-ixns** to `true` enables Genesys Info Mart to generate BUSY states for agents based on multimedia interaction data, resulting in more accurate agent state reporting. However, be aware that state durations might still not be reported accurately if time is not synchronized among the Interaction Servers in the cluster — for example, a state duration might be reported as one second less than actual.

- Support for Red Hat OpenJDK 11. See the Prerequisites section on the Genesys Info Mart page in the *Genesys Supported Operating Environment Reference Guide* for more detailed information and a list of all prerequisites.

New in Release 8.5.015.23

Important

Genesys Info Mart 8.5.015.23 requires Interaction Concentrator (ICON) 8.1.100.36 or higher. To enable all of the functionality provided in this release, Genesys Info Mart requires Interaction Concentrator release 8.1.514.47 or higher.

Release 8.5.015.23 introduces the following new features and functionality:

- **Mediation reporting enhancement** — A new configuration option, fix-missing-party-links in the **[gim-transformation]** section, enables you to reduce the number of redundant records in the MEDIATION_SEGMENT_FACT (MSF) table by improving Genesys Info Mart handling of scenarios in which parent party or other party information is missing when an interaction repeatedly enters the same interaction queue or virtual queue. The default value of `false` preserves the existing behavior of creating multiple MSFs in these situations.

- **Support for skills expressions up to 1024 characters** — In deployments that use ICON 8.1.514.47 or higher and where the ICON cfg-long-vag-script configuration option has been set to 1 (true), Genesys Info Mart now stores skills expressions up to 1024 characters in the SCRIPT column in the GIDB_GC_GROUP table. (The schema change to support this enhancement was introduced in Genesys Info Mart release 8.5.015.07.)

- **Operating environment changes:**

    - Support for Microsoft SQL Server 2019 Cluster. See the Genesys Info Mart page in the *Genesys Supported Operating Environment Reference* for more detailed information and a list of all supported databases.

    - Support for a number of operating systems and RDBMS versions has been discontinued. See the Discontinued Support summary in the *Genesys Info Mart 8.5.x Release Note* for more details.

New in Release 8.5.015.19

> **Important**
>
> Genesys Info Mart 8.5.015.19 requires Interaction Concentrator (ICON) 8.1.100.36 or higher. To enable all of the functionality provided in this release, Genesys Info Mart requires Interaction Concentrator release 8.1.514.27 or higher.

Release 8.5.015.19 introduces the following new features and functionality:

- **Reporting on bot activity in Genesys Designer applications** — Genesys Info Mart now supports reporting on voice bot and chat bot activity orchestrated with Genesys Designer. (Support for Genesys Designer is available in certain Genesys Engage cloud and on-premises deployments.) Three new tables store bot-related data for Designer analytics:

  - SDR_BOTS_FACT

  - BOT_ATTRIBUTES

  - BOT_INTENT

    For more information about the new tables, as well as other schema-related changes in release 8.5.015.19, see the *Physical Data Model* for your RDBMS (for Microsoft SQL Server, Oracle, or PostgreSQL, respectively).

- **Miscellaneous enhancements:**

  - General Data Protection Regulation (GDPR) processing now includes the TARGET_OBJECT_SELECTED column in the ROUTING_TARGET table.

  - A new configuration option, cb-virtual-queue-pattern in the **[gim-transformation]** section, enables you to fine-tune Genesys Info Mart behavior with respect to excluding callback virtual queues from mediation reporting.

  - The retention period for active multimedia facts, which is defined by the days-to-keep-active-facts configuration option, no longer affects the purge threshold for multimedia facts in GIDB, which is defined by days-to-keep-gidb-facts.

  - The behavior of the chunk-size configuration option provides improved transformation of data that comes through Elasticsearch and Kafka.

  - The scope of the max-time-deviation configuration option is extended to improve multimedia processing in certain ICON scenarios.

  - Language in the Genesys Info Mart application and documentation has been revised in accordance with a corporate initiative towards inclusive language. For example, the word *master* (as in *master [database] lock*) has been removed from log messages.

- **Support for Elasticsearch 7.6** — For data that comes to Genesys Info Mart through Elasticsearch, Genesys Info Mart supports extracting data from Elasticsearch 7.6 databases.

- **Enhanced operating environment support** — See the Genesys Info Mart page in the *Genesys Supported Operating Environment Reference* for more detailed information and a list of all supported environments and databases. This release adds support for:

  - Red Hat Enterprise Linux 8

- Oracle 19c RAC
- PostgreSQL 11
- PostgreSQL 12.x

    See also the Discontinued Support section in the *Genesys Info Mart 8.5.x Release Note* for discontinued third-party prerequisites starting with this release.

New in Release 8.5.015.14

> **Important**
>
> Genesys Info Mart 8.5.015.14 requires Interaction Concentrator (ICON) 8.1.100.36 or higher. To enable all of the functionality provided in this release, Genesys Info Mart requires Interaction Concentrator release 8.1.514.27 or higher.

Release 8.5.015.14 introduces the following new features and functionality:

- A new column, GVP_SESSION_ID, has been added to the IRF_USER_DATA_GEN_1 table for internal purposes. The ICON attached-data specification file (**ccon_adata_spec_GIM_Example.xml**) included in the 8.5.015.14 Info Mart database scripts IP has been updated to include the GVP-Session-ID KVP ICON is required to store for this purpose.

New in Release 8.5.015.07

> **Important**
>
> Genesys Info Mart 8.5.015.07 requires Interaction Concentrator (ICON) 8.1.100.36 or higher. To enable all of the functionality provided in this release, Genesys Info Mart requires Interaction Concentrator release 8.1.514.27 or higher.

Release 8.5.015.07 introduces the following new features and functionality:

- **Outbound Contact reporting enhancement** — A new configuration option, ocs-caf-aggregates-calls in the **[gim-transformation]** section, enables you to control whether Genesys Info Mart creates separate CONTACT_ATTEMPT_FACT (CAF) records or a single, aggregated CAF record for multiple call attempts dialed in the context of the same CALL_ATTEMPT_GUID.
    Contrary to usual Genesys practice, the default value of $true$ (Genesys Info Mart creates a single, aggregated CAF record) represents a change in Genesys Info Mart behavior, so as to improve compatibility with Genesys-provided aggregation and reports (Reporting and Analytics Aggregates [RAA] and Genesys CX Insights [GCXI]).

For information about related database changes, see the *Physical Data Model* for your RDBMS (Microsoft SQL Server, Oracle, PostgreSQL).

- **Support for Elasticsearch 7.x** — For data that comes to Genesys Info Mart through Elasticsearch, Genesys Info Mart supports extracting data from Elasticsearch 7.x databases.

- **Database-related enhancements**

  - For Microsoft SQL Server, Genesys Info Mart now supports using a case-sensitive collation for the Info Mart database. If you want to use a case-sensitive collation in a deployment that includes Genesys-provided aggregation, you must use RAA release 8.5.011.02 or later.

  - A new configuration option, cp-reuse-count in the [gim-etl] section of extraction and transformation DAPs, enables you to control connection-pooling behavior by specifying the number of times connections can be reused. (The default is no limit.)

  - For additional schema changes in this release, see the *Physical Data Model* for your RDBMS (links above).

- **Enhanced operating environment support** — See the Genesys Info Mart and Virtualization Platform Support pages in the *Genesys Supported Operating Environment Reference* for more detailed information and a list of all supported environments and databases. This release adds support for:

  - Microsoft Windows Server 2019

  - Microsoft SQL Server 2019

  - Microsoft Hyper-V Server 2019

  - Oracle 18c RAC database

New in Release 8.5.014.34

> ## Important
>
> Genesys Info Mart 8.5.014.34 requires Interaction Concentrator (ICON) 8.1.100.36 or higher. To enable all of the functionality provided in this release, Genesys Info Mart requires Interaction Concentrator release 8.1.514.27 or higher.

Release 8.5.014.34 introduces the following new features and functionality:

- **Enhanced support for Unicode in Microsoft SQL Server** — In Microsoft SQL Server deployments with single-language databases, the data types of some columns in certain dimension tables have been changed from `varchar` to `nvarchar`, to extend support of Unicode characters in single-language databases. For consistency, the size of some existing `nvarchar` columns in multi-language databases has also been modified.

- **Data Export enhancements** — Modifications to the **update_target_*.sql** scripts for creating or updating a Microsoft SQL Server target database improve support for scenarios where data is exported from a PostgreSQL or Oracle Info Mart database and subsequently imported into a Microsoft SQL Server target database.

- Support for Oracle 19c database. See the Genesys Info Mart page in the *Supported Operating*

Environment Reference for more detailed information and a list of all supported databases.

For more information about the schema changes and data export enhancements in this release, see the "New in This Release" page in the *Physical Data Model for a Microsoft SQL Server Database.*

New in Release 8.5.014.26

> **Important**
>
> Genesys Info Mart 8.5.014.26 requires Interaction Concentrator (ICON) 8.1.100.36 or higher. To enable all of the functionality provided in this release, Genesys Info Mart requires Interaction Concentrator release 8.1.514.27 or higher.

Release 8.5.014.26 introduces the following new features and functionality:

- **Support for Asynchronous interactions in Advanced Chat deployments** — In Genesys Engage cloud deployments with Advanced Chat, Genesys Info Mart supports reporting on Asynchronous interactions that are placed into a parking queue. Two new columns, PARKING_QUEUE_COUNT and PARKING_QUEUE_DURATION, have been added to the CHAT_SESSION_FACT table. The ICON attached-data specification file (**ccon_adata_spec_GIM_Example.xml**) included in the 8.5.014.26 Info Mart database scripts IP has been updated to include the additional KVPs ICON is required to store for reporting on asynchronous Advanced Chat interactions.

- **Elasticsearch enhancement** — A new configuration option, rest:max-content-length in the **[elasticsearch-<data-source-id>]** section, specifies the maximum permitted size for responses to Elasticsearch REST requests.

- **Configuration verification enhancement** — During startup and at various times during runtime in high availability (HA) deployments, Genesys Info Mart now checks that connections to the data sources are correctly specified. As described on the Enabling High Availability page, the *primary* application (T-Server, Outbound Contact Server, or Interaction Server) must be specified for both ICON connections in the HA pair. If an ICON connection points to a backup application in the HA pair of data sources, Genesys Info Mart generates an error.
    A new configuration option, error-policy-cfg-check-backup-data-source in the **[error-policy]** section enables you to define the severity level for misconfiguration of ICON connections to highly available (HA) data sources.

New in Release 8.5.014.19

> **Important**
>
> Genesys Info Mart 8.5.014.19 requires Interaction Concentrator (ICON) 8.1.100.36 or higher. To enable all of the functionality provided in this release, Genesys Info Mart

> requires Interaction Concentrator release 8.1.514.27 or higher.

Release 8.5.014.19 introduces the following new features and functionality:

- **Reporting on agent location** — A new dimension table, AGENT_LOCATION, and a new column, AGENT_LOCATION_KEY, in the SM_RES_SESSION_FACT table enable you to record the locations of agents for both voice and multimedia login sessions. Interaction Concentrator release 8.1.514.27 is required to provide the location data from SIP Server and Interaction Server releases that support this functionality.

- **Configuration for secure connection to Kafka** — In deployments that rely on obtaining reporting data from Kafka, you can set native Kafka configuration options in the **kafka-<cluster-name>** configuration section to enable a secure client connection from Genesys Info Mart to the Kafka instance. For more details about security options you should consider if your Kafka cluster uses SASL_SSL authentication of if you are using SSL connections with a self-signed certificate, see kafka-<cluster-name> Section in the *Genesys Info Mart Options Reference.*

- **Miscellaneous enhancements**:

  - A new configuration option, ixn-data-limit in the **[gim-transformation]** section, improves Genesys Info Mart handling of scenarios with excessive numbers of input records, by limiting the number of such records per INTERACTION_FACT record. If the actual number of records exceeds the configured limit, error message 55-20106 is logged, and the interaction is discarded. The option applies only to voice interactions. Previously in such scenarios, an OutOfMemory error could occur.

  - To enhance reporting on Genesys Predictive Routing, two new columns in the GPM_FACT table -- VQ_GUID and VQ_RESOURCE_KEY -- enable you to join GPM_FACT to MEDIATION_SEGMENT_FACT. Use this join to make information about virtual queues (VQs) that participate in Predictive Routing interactions available in reports.

  - Two new dimension tables, USER_DATA_GEN_DIM_1 and USER_DATA_GEN_DIM_2, have been added to the Info Mart schema to store out-of-box user data for internal use. Corresponding keys, USER_DATA_GEN_DIM_KEY_1 and USER_DATA_GEN_DIM_KEY_2, have been added to the IRF_USER_DATA_KEYS table, accordingly.

- **Enhanced operating environment support** — See the Genesys Info Mart page in the *Genesys Supported Operating Environment Reference Guide* for more detailed information and a list of all supported environments and databases. This release adds support for:

  - Java SE 9, including support for all updates

  - Kernel Virtual Machine (KVM), embedded as part of the Linux Kernel Package

  - Microsoft SQL Server 2017

  - PostgreSQL 9.4

New in Release 8.5.014.14

> **Important**
>
> Genesys Info Mart 8.5.014.14 requires Interaction Concentrator (ICON) 8.1.100.36 or higher. To enable all of the functionality provided in this release, Genesys Info Mart requires Interaction Concentrator release 8.1.514.11 or higher.

Release 8.5.014.14 introduces the following new features and functionality:

- **Outbound Contact processing improvement** — A new configuration option, ocs-chain-history-limit in the **[gim-transformation]** section, combined with a new log message, 55-20176, improves Genesys Info Mart handling of scenarios that result in excessive numbers of GO_FIELD_HIST and GO_CHAINREC_HIST records, by limiting the number of GIDB_GO_FIELDHIST and GIDB_GO_CHAINREC_HIST records that can be associated with a particular CHAINGUID. Previously in such scenarios, an OutOfMemory error could occur.

- **Logging enhancement** — To improve the readability of logs, Genesys Info Mart no longer logs Genesys Info Mart Manager (GIM Manager) requests or responses by default.

New in Release 8.5.014.09

> **Important**
>
> Genesys Info Mart 8.5.014.09 requires Interaction Concentrator (ICON) 8.1.100.36 or higher. To enable all of the functionality provided in this release, Genesys Info Mart requires Interaction Concentrator release 8.1.514.11 or higher.

Release 8.5.014.09 introduces the following new features and functionality:

- **Predictive Routing enhancements** — Genesys Info Mart now supports enhanced reporting on Genesys Predictive Routing (GPR) usage, including more detailed reporting about scores, thresholds, predictors, and routing. To enable the enhanced reporting, new KVPs from Predictive Routing - URS Strategy Subroutines release 9.0.015.00 or higher populate a new Info Mart dimension table, GPM_DIM1, and new columns in the GPM_FACT table. In addition, the values provided in some existing KVPs have been modified.
    For more information about:

  - The Info Mart database schema changes, see the Physical Data Model reference for your RDBMS.

  - The reporting KVPs sent by GPR, see Genesys Predictive Routing (GPR) in this document and Integrate with Genesys Reporting in the GPR *Deployment and Operations Guide.*

- **Support for Chat Thread reporting** — In Genesys Engage cloud deployments with Advanced Chat, Genesys Info Mart supports reporting on chat threads:

- New tables, CHAT_THREAD_FACT and MEDIA_ORIGIN, store data for chat thread statistics. A new column in the CHAT_SESSION_FACT table, THREAD_ID, has been included for future use, to associate chat session with chat thread reporting.

- A new Genesys CX Insights (GCXI) report, Chat Thread Report, is populated from the summarized thread data now available in Genesys Info Mart in cloud deployments. (Chat Thread reporting in GCXI requires Reporting and Analytics Aggregates [RAA] release 8.5.009.04 or higher and GCXI release 9.0.011.00 or higher.) For more information, see the Chat Thread Report in the *Reporting in the cloud* guide.

- The ICON attached-data specification file (**ccon_adata_spec_GIM_Example.xml**) included in the 8.5.014.09 Info Mart database scripts IP has been updated to include the additional KVPs ICON is required to store for chat thread reporting.

- **Operating environment support** — Support for the following operating system and third-party prerequisites was added. See the Genesys Info Mart page in the *Supported Operating Environment Reference* for more detailed information.

  - Oracle Linux 7 operating system

  - OpenJDK 11

- **Logging Enhancements** — A new log event, 55-20175, supports improved handling of Outbound Contact scenarios where CONTACT_ATTEMPT_FACT records contain unsupported values. For more information, see *Genesys Info Mart 8.5 Log Events Help*.

New in Release 8.5.013.06

> ## Important
>
> Genesys Info Mart 8.5.013.06 requires Interaction Concentrator (ICON) 8.1.100.36 or higher. To enable all of the functionality provided in this release, Genesys Info Mart requires Interaction Concentrator release 8.1.514.11 or higher.

Release 8.5.013.06 introduces the following new features and functionality:

- **Enhanced omnichannel reporting** — Two new columns in the SM_MEDIA_NEUTRAL_STATE_FACT table, END_DATE_TIME_KEY and RESOURCE_GROUP_COMBINATION_KEY, enhance support for reporting across all media channels.

- **Multimedia and Outbound Contact transformation enhancement** — A new configuration option, chunk-size in the **[gim-transformation]** section, enables you to decouple the chunk size for transformation of Multimedia and Outbound Contact details from the chunk size for data extraction. You can use this option to temporarily reduce transformation chunk size, to improve transformation performance and help avoid OutOfMemory errors in situations where there is an unusually large quantity of data to be transformed (for example, because "runaway strategy" scenarios have occurred).

- **Support for variable-sized Elasticsearch indices** — A new configuration option, g:index-interval in the **[elasticsearch-<data-source-id>]** section(s), enables you to override the default Elasticsearch index interval, so that Genesys Info Mart correctly processes Elasticsearch indices where the size of the index interval is not fixed.

- **Support for Call Detail Records (CDRs)** — In preparation for future support of CDRs for billing or other monitoring purposes, new CDR_* tables have been added to the Info Mart database schema. The **make_gim** SQL scripts have been modified to include the new table definitions and KVP mappings. Although the CDR_* tables are populated in cloud deployments, they are considered reserved for internal use.

- **Logging enhanement for Outbound Contact** — A new log event, 55-20174, supports improved handling of Outbound Contact scenarios where Campaign Group dialing modes are configured with unsupported values. For more information, see the Resolved Issue for GIM-12305 in the *Release Notes* for this release.

New in Release 8.5.012.15

Important

Genesys Info Mart 8.5.012.15 requires Interaction Concentrator (ICON) 8.1.100.36 or higher. To enable all of the functionality provided in this release, Genesys Info Mart requires Interaction Concentrator release 8.1.514.11 or higher.

Release 8.5.012.15 introduces the following new features and functionality:

- **Support for reporting on Co-browse sessions** — In Genesys Engage cloud deployments with Co-browse Server 9.0.003.02 or higher, Genesys Info Mart now supports reporting on Co-browse sessions. Co-browse data is populated in the COBROWSE_* tables that were originally added to the Info Mart schema in release 8.5.011.14.

- **Outbound Contact reporting extended to unattempted records** — In Outbound Contact deployments with CX Contact release 9.0.000.09 or higher, Genesys Info Mart now supports reporting on contact list records that were suppressed from an outbound campaign. New LDR_* tables in the Info Mart database are populated with data that Genesys Info Mart obtains from CX Contact through Elasticsearch. The new tables supplement existing reporting about campaign activity and calling list usage sourced from Outbound Contact Server (OCS) through ICON.
    Genesys Info Mart support for CX Contact reporting on unattempted records is defined out-of-box and cannot be customized.

    For more information about:

  - CX Contact support for this feature, including a definition of what constitutes an *unattempted record* in this context, see Integrating CX Contact with Genesys Historical Reporting in the *CX Contact Deployment Guide*

  - The new LDR_* tables, see the *Genesys Info Mart Physical Data Model* for your RDBMS

- Support for Oracle 18c database. See the Genesys Info Mart page in the *Supported Operating Environment Reference* for more detailed information and a list of all supported databases.

New in Release 8.5.011.23

> **Important**
>
> Genesys Info Mart 8.5.011.23 requires Interaction Concentrator (ICON) 8.1.100.36 or higher. To enable all of the functionality provided in this release, Genesys Info Mart requires Interaction Concentrator release 8.1.514.11 or higher.

Release 8.5.011.23 introduces the following new features and functionality:

- **Enhancement for data extracted from Kafka**—A new configuration option, kafka-idle-timeout in the [gim-transformation] section, enables you to define the idle timeout for polling Kafka records. If polling does not return any records within the timeout, Genesys Info Mart stops polling Kafka until the next ETL cycle.

- **Support for Elasticsearch 6.x**—Genesys Info Mart now extracts data from indices created in Elasticsearch 6.x or later, without considering the mapping type assigned to the document. Genesys Info Mart continues to support indices created in Elasticsearch 5.x, potentially with multiple mapping types.

New in Release 8.5.011.22

> **Important**
>
> Genesys Info Mart 8.5.011.22 requires Interaction Concentrator (ICON) 8.1.100.36 or higher. To enable all of the functionality provided in this release, Genesys Info Mart requires Interaction Concentrator release 8.1.514.11 or higher.

Release 8.5.011.22 introduces the following new features and functionality:

- **Data Export supported in on-premises deployments**—Data Export functionality, introduced previously for Genesys Engage cloud customers, is now supported in on-premises deployments as well. For full information, see the "About Data Export" page in the *Genesys Info Mart Physical Data Model* for your RDBMS:
  - For Microsoft SQL Server, click here.
  - For Oracle, click here.
  - For PostgreSQL, click here.

New in Release 8.5.011.18

> **Important**
>
> Genesys Info Mart 8.5.011.18 requires Interaction Concentrator (ICON) 8.1.100.36 or higher. To enable all of the functionality provided in this release, Genesys Info Mart requires Interaction Concentrator release 8.1.514.11 or higher.

Release 8.5.011.18 introduces the following new features and functionality:

- **Support for obtaining reporting data from Kafka** — As further preparation for future support of alternative data streams, Genesys Info Mart now supports obtaining reporting data from Genesys applications via Apache Kafka. Genesys Info Mart support for reporting data from Kafka-enabled applications is predefined and cannot be customized.

    - A new configuration section, kafka-<cluster-name>, and two new options, bootstrap.servers and g:topic:<topic-name>, provide the connection and topic information that enables Genesys Info Mart to consume data from Apache Kafka.

    - The **make_gim** SQL scripts have been modified to include Avro schema definitions and CTL_XML_CONFIG mappings for data from the first two producer applications that plan to use Kafka, namely, Bot Gateway Server (BGS) and Genesys Co-browse (GCB). Once Kafka-enabled BGS and GCB releases are available and the Kafka-related Genesys Info Mart configuration options (above) have been set, the BGS and COBROWSE tables in the Info Mart database will be populated with data from Kafka.

        > **Important**
        >
        > BGS is currently available only in restricted release, and Genesys Info Mart currently supports BGS reporting via Elasticsearch. Existing customers can continue to use Elasticsearch.

- **Miscellaneous enhancements**

    - Genesys Info Mart now supports reporting on outbound call flows in SIP Cluster deployments where SIP Server can disable recording and monitoring.

    - A new GIM_ETL_GDPR_SUCCESS log message, STANDARD-level message 55-20173, replaces the previous TRACE-level message, 55-31406. The message indicates that "export" and "forget" requests submitted in accordance with the European Union's General Data Protection Regulation (GDPR) were processed successfully.

    - Genesys Info Mart now supports Secure Socket Layer (SSL) connections to encrypt database client/server communications on PostgreSQL deployments, as well as on Microsoft SQL Server and Oracle deployments. For more information, see Enabling Secure Connections.

    - For additional schema changes, see the "New in Release 8.5.011.18" section in the *Genesys Info Mart Physical Data Model* for your RDBMS.

    - (Introduced in release 8.5.011.15) A new configuration option, g:tenant-prefix in the **[elasticsearch-<data-source-id>]** section(s), supports SDR and other reporting where Genesys Info Mart obtains the data from an Elasticsearch cluster shared across multiple tenants.

New in Release 8.5.011.14

> **Important**
>
> Genesys Info Mart 8.5.011.14 requires Interaction Concentrator (ICON) 8.1.100.36 or higher. To enable all of the functionality provided in this release, Genesys Info Mart requires Interaction Concentrator release 8.1.514.11 or higher.

Release 8.5.011.14 introduces the following new features and functionality:

- **Support for async chat reporting** — In eServices deployments with Chat Server release 8.5.302.03 or higher, Genesys Info Mart extends support for chat session reporting to include detailed reporting on asynchronous (async) chat sessions. New columns in the CHAT_SESSION_FACT and CHAT_SESSION_DIM tables store async chat statistics in the Info Mart dimensional model database schema.

    In deployments that include Reporting and Analytics Aggregates (RAA) release 8.5.005 or higher and Genesys CX Insights (GCXI) release 9.0.007 or higher, new aggregate (AGT_CHAT_) tables in the Info Mart database provide the summarized session data required to populate out-of-box async chat dashboards. For more information, see the RAA Release Notes, as well as the information about async chat dashboards in the *GCXI 9.0 User's Guide.*

    The ICON attached-data specification file (**ccon_adata_spec_GIM_Example.xml**) included in the 8.5.011.14 Info Mart database scripts IP has been updated to include the additional KVPs ICON is required to store for async chat reporting. For more information and related links about enabling chat reporting in your deployment, see Chat Server on the User Data Sources and KVPs page.

- **Support for Transport Layer Security (TLS) 1.2** — Genesys Info Mart supports TLS 1.2 to secure connections with other Genesys applications at the host, port, or application level. For full information, see the pages starting from Secure Connections (TLS) in the *Genesys Security Deployment Guide* and Secure connections using TLS in the *Platform SDK Developer's Guide.* For a summary of the configuration steps to secure Genesys Info Mart connections to other Genesys applications, see Enabling Secure Connections in this deployment guide.

- **Miscellaneous**

    - This release includes additional schema-related changes to improve user-data processing and to prepare support for new areas of reporting. For more information, see the "New in Release 8.5.011.14" section in the *Genesys Info Mart Physical Data Model* for your RDBMS.

    - In further preparation for future support (on premises deployments) for reporting on applications that do not send data to Genesys Info Mart through ICON, a new configuration option, sources:extra in the **elasticsearch-<data-source-id>** configuration section, enables you to configure multiple data sources in a single configuration section, for data stored in a single Elasticsearch database.

    - Recommendations on partition sizes for GIDB and fact tables in PostgreSQL deployments have been refined. For more information, see Database Partitioning.

New in Release 8.5.011

> **Important**
>
> Genesys Info Mart 8.5.011 requires Interaction Concentrator (ICON) 8.1.100.36 or higher. To enable all of the functionality provided in this release, Genesys Info Mart requires Interaction Concentrator release 8.1.514.06 or higher. In multimedia deployments, Genesys recommends using Interaction Concentrator release 8.1.514.11 or higher.

Release 8.5.011 introduces the following new features and functionality:

- **Support for chat reporting** — In eServices deployments with Chat Server release 8.5.203.09 or later, Genesys Info Mart supports detailed reporting on Genesys Chat sessions. Two new tables, CHAT_SESSION_FACT and CHAT_SESSION_DIM, store session statistics in the Info Mart dimensional model database schema, and a control table, CTL_XML_CONFIG, is used internally to map Chat Server KVPs to the chat session tables during transformation.

  In deployments that include Bot Gateway Server (BGS) release 9.0.002 or later, Genesys Info Mart also supports reporting on chat bot activity. A new fact table, BGS_SESSION_FACT, and three new BGS_* dimension tables store BGS-related data in the Info Mart dimensional model. (BGS is currently available only in restricted release. For more information about including chat bot functionality in your eServices deployment, contact your Genesys account representative.)

  In deployments that include Reporting and Analytics Aggregates (RAA) release 8.5.003 or later and Genesys CX Insights (GCXI) release 9.0.005 or later, new aggregate (AGT_*) tables in the Info Mart database provide the summarized session data required to populate new chat session reports and a dashboard, which are available out-of-box. For more information, see the RAA Release Notes, as well as the information about Chat Reports and Chat Bot reports and dashboards in the *GCXI 9.0 User's Guide*. (GCXI is currently available only in restricted release. For more information about including GCXI reports in your deployment, contact your Genesys account representative.)

  For more information and related links about enabling chat reporting in your deployment, see Chat Server on the User Data Sources and KVPs page.

- **Schema changes** — For full information about the new CHAT_* and BGS_* tables, as well as other schema changes in release 8.5.011, see the *Genesys Info Mart Physical Data Model* for your RDBMS.

New in Release 8.5.010.16

> **Important**
>
> Genesys Info Mart 8.5.010.16 requires Interaction Concentrator (ICON) 8.1.100.36 or higher. To enable all of the functionality provided in this release, Genesys Info Mart requires Interaction Concentrator release 8.1.514.06 or higher. In multimedia deployments, Genesys recommends using Interaction Concentrator release 8.1.514.11 or higher.

Release 8.5.010.16 introduces the following new features and functionality:

- **Enhanced support for General Data Protection Regulation (GDPR) compliance** — Support for

GDPR compliance has been extended to employee requests. The scope of the CTL_GDPR_HISTORY history table has been similarly extended. Additionally, the UPDATE_AUDIT_KEY column was added to the CALLBACK_FACT, GPM_FACT, and SDR_* fact tables. For tables that might contain personally identifiable information (PII), the presence of the audit key enables enhanced GDPR support in deployments that include the Data Export feature.

> For more information about the CTL_GDPR_HISTORY history table and other schema changes in release 8.5.010.16, see the "New in This Release" page in the *Genesys Info Mart Physical Data Model* for your RDBMS. For more information about Genesys Info Mart support for GDPR compliance, see Genesys Info Mart Support for GDPR in the *Genesys Security Deployment Guide.*

New in Release 8.5.010

> **Important**
>
> Genesys Info Mart 8.5.010 requires Interaction Concentrator (ICON) 8.1.100.36 or higher. To enable all of the functionality provided in this release, Genesys Info Mart requires Interaction Concentrator release 8.1.514.06 or higher. In multimedia deployments, Genesys recommends using Interaction Concentrator release 8.1.514.11 or higher.

Release 8.5.010 introduces the following new features and functionality:

- **Support for General Data Protection Regulation (GDPR) compliance** -- To enable customers to comply with Right to Access ("export") or Right of Erasure ("forget") requests from their customers ("consumers"), Genesys Info Mart reports or redacts customer-specified personally identifiable information (PII) stored in Info Mart fact tables. The daily Info Mart database maintenance job, **Job_MaintainGIM**, automatically processes new GDPR requests, which customers provide in tenant-specific JSON files. To enable GDPR support:

  - The CTL_GDPR_HISTORY table and a number of other new control and temporary tables have been added to the Info Mart database schema. The CTL_GDPR_HISTORY table reports the actual PII data that was requested for export or was redacted by a "forget" request. For more details, see the "New in This Release" information in the *Physical Data Model* for your RDBMS.

  - A new configuration option in the [gim-etl] section, days-to-keep-gdpr-history, enables you to control how long data will be retained in the CTL_GDPR_HISTORY table; the maximum retention period is 30 days.

  - Two new log events, 55-20172 (GIM_ETL_GDPR_ERROR) and 55-31406 (GIM_ETL_GDPR_SUCCESS) report the status of GDPR request processing, by tenant. You can set an alarm on the GIM_ETL_GDPR_ERROR message, to alert you to problems that are preventing completion of GDPR processing.

    For more information about Genesys Info Mart support for GDPR compliance, see General Data Protection Regulation (GDPR) and Genesys Info Mart and GDPR in the *Genesys Security Deployment Guide.* For more information about the maintenance job, see Job_MaintainGIM in the *Genesys Info Mart Operations Guide.*

- **Preparing support for alternative data streams** — In future releases, Genesys Info Mart will

support obtaining data from data streams that do not go through Interaction Concentrator. Info Mart database schema changes have been made to prepare support for these alternative data channels. For full details, see the "New in This Release" information in the *Physical Data Model* for your RDBMS.

- **Support for upgraded GIM Manager** — Genesys Info Mart supports GIM Manager 8.5.010, which is the minimum release required for Genesys Administrator Extension (GAX) 8.5.270.06 and higher (see the system requirements for GIM Manager).

- **Further relaxation of database privileges for PostgreSQL** — To enable tenant views to be recreated as required by Genesys Info Mart and Reporting & Analytics Aggregates (RAA) when the Info Mart and RAA database users are not the same, the Info Mart database user now needs to be granted the Tenant User role, instead of schema owner permissions (see Required Database Privileges). The PostgreSQL **make_gim_view_for_tenant.sql** script has been modified accordingly.

New in Release 8.5.009.20

> ### Important
>
> Genesys Info Mart 8.5.009.20 requires Interaction Concentrator (ICON) 8.1.100.36 or higher. To enable all of the functionality provided in this release, Genesys Info Mart requires Interaction Concentrator release 8.1.514.06 or higher. In multimedia deployments, Genesys recommends using Interaction Concentrator release 8.1.514.11 or higher.

Release 8.5.009.20 introduces the following new features and functionality:

- **Enhanced Callback reporting** — Two new dimension tables (CALLBACK_DIAL_RESULTS and CALLBACK_DIM_4) and a number of new CALLBACK_FACT table columns extend support for Callback reporting by providing more data about dialing attempts and dial results. For detailed information about the schema changes, see the Physical Data Model for your RDBMS.

  The CALLBACK_* table columns are populated with actual data when you use a Genesys Mobile Services (GMS) release that provides the required user data KVPs. GMS 8.5.200.07 or later provides the KVPs that are used to populate the new tables and columns. For more information about the Callback-related KVPs that GMS supports, see Genesys Mobile Services (GMS) — for Callback.

- **Enhanced query performance** — The index I_GPM_FACT_SDT, on the START_DATE_TIME_KEY in the GPM_FACT table, is now defined for partitioned databases. The index improves the performance of queries that are bounded by time. Previously, the index was added to the GPM_FACT table in the schema-creation script for nonpartitioned databases (**make_gim.sql**), but not in the script for partitioned databases (**make_gim_partitioned.sql**).

- **Support for Elasticsearch version 5.0+ via RESTful API** — In preparation for future support (on premises deployments), for reporting on applications that do not send data to Genesys Info Mart through ICON, Genesys Info Mart now supports use of the Elasticsearch REST API client to retrieve data from an Elasticsearch 5.0 or later database. A new configuration section in the Info Mart application, **[elasticsearch-<data-source-id>],** and a new configuration option, client, enable you to specify the Elasticsearch cluster that Genesys Info Mart will use to retrieve data from the data source identified by <data-source-id>.

New in Release 8.5.009

> ### Important
> Genesys Info Mart 8.5.009 requires Interaction Concentrator (ICON) 8.1.100.36 or higher. To enable all of the functionality provided in this release, Genesys Info Mart requires Interaction Concentrator release 8.1.514.06 or higher. In multimedia deployments, Genesys recommends using Interaction Concentrator release 8.1.514.11 or higher.

Release 8.5.009 introduces the following new features and functionality:

- **Support for Genesys Predictive Routing (GPR) reporting** — Genesys Info Mart now supports reporting on GPR usage and the impact of predictive routing on agent and interaction-handling KPIs for voice, web, and mobile channels. Genesys Info Mart support for GPR reporting is provided out-of-box, provided that GPR has been configured to send the required KVPs in UserEvents and that ICON has been configured to store those KVPs. New **GPM_*** tables in the Info Mart schema store GPR-related data:

  - GPM_FACT

  - GPM_RESULT

  - GPM_PREDICTOR

  - GPM_MODEL

  For more information about:

  - The new tables for GPR reporting, see the Physical Data Model for your RDBMS

  - The KVPs that Genesys Info Mart requires, see Genesys Predictive Routing (GPR)

  - Setting up the data flow between GPR and Genesys Info Mart, see Deploying: Integrating with Genesys Info Mart in the Genesys Predictive Routing (formerly Predictive Matching) *Deployment and Operations Guide*

- **Relaxed database permissions for PostgreSQL** — In PostgreSQL deployments that use read-only tenant views, the name of the Tenant User no longer needs to be the same as the name of the Tenant User schema. On the other hand, the Info Mart user (the user account used to run Info Mart jobs) requires access to the tenant user schemas and the tenant views. The **make_gim_view_for_tenant.sql** script has been modified so that you now separately specify the names of the Tenant User schema and the Tenant User, as well as the Info Mart user, when you create the tenant views. For information about the database permissions required for PostgreSQL, see Required Database Privileges. For information about creating the tenant views, see Creating Read-Only Views – PostgreSQL.

- **Performance improvements** — Various internal enhancements improve Genesys Info Mart ETL performance. The improvements include changes to the way the extraction job handles connections to IDBs, using pooled connections that do not close until extraction is complete. As a result, your DBAs might notice a large increase in the number of open connections, many of them idle, during extraction. For more information, see Database Connections.

New in Release 8.5.008.29

> **Important**
>
> Genesys Info Mart 8.5.008.29 requires Interaction Concentrator (ICON) 8.1.100.36 or higher. To enable all of the functionality provided in this release, Genesys Info Mart requires Interaction Concentrator release 8.1.514.06 or higher. In multimedia deployments, Genesys recommends using Interaction Concentrator release 8.1.514.11 or higher.

Release 8.5.008.29 introduces the following new features and functionality:

- **Genesys Designer reporting enhancements** — New SDR_SURVEY_* tables (SDR_SURVEY_FACT, SDR_SURVEY_QUESTIONS, SDR_SURVEY_ANSWERS) support reporting on post-call surveys for interaction flows that involve applications developed with Genesys Designer. (Genesys Designer is supported in certain Genesys Engage cloud deployments.) For more information, see the Genesys Info Mart Physical Data Model for your RDBMS.

New in Release 8.5.008

> **Important**
>
> Genesys Info Mart 8.5.008 requires Interaction Concentrator (ICON) 8.1.100.36 or higher. To enable all of the functionality provided in this release, Genesys Info Mart requires Interaction Concentrator release 8.1.514.06 or higher. In multimedia deployments, Genesys recommends using Interaction Concentrator release 8.1.514.11 or higher.

Release 8.5.008 introduces the following new features and functionality:

- **Genesys Designer reporting enhancements** — Additional schema changes support reporting on interaction flows that involve applications developed with Genesys Designer. (Support for Genesys Designer is available in certain Genesys Engage cloud implementations.) For more information, see the Physical Data Model for your RDBMS.
- **Logging Enhancements** — Various logging enhancements enable improved management of Genesys Info Mart.
  - Log message 20110 now identifies the ICONs that are delaying extraction. Furthermore, log message 20171 has been added as a cancel message for 20110. Previously, log message 20110 logged information about delayed data sources, but it was not easy to determine which ICONs were delayed.
  - Genesys Info Mart now logs information to link the database connection ID and the DAP name. This link can help in finding the root cause of an issue. Previously, the logs showed only the connection

ID.

- When the system property UseDbLinks=false, the extraction job no longer shows misleading database link information when logging DAPs ("-> DbLink=").

- **Miscellaneous improvements**

  - Various internal enhancements, in some cases with associated schema changes, improve Genesys Info Mart performance. For information about the schema changes, see the Physical Data Model for your RDBMS.

  - In deployments that include aggregation, the transformation job now includes media-neutral agent states in notifications sent to the aggregation engine about new or changed data.

  - A new configuration option, routing-target-regular-dn-fold-external was introduced in a hot fix (8.5.008.25) subsequent to the initial 8.5.008 release. The option controls whether Genesys Info Mart populates ROUTING_TARGET records for each distinct regular external DN, or folds them into a single record with the TARGET_OBJECT_SELECTED value set to EXTERNAL.

- **Operating system support** — Support for the Microsoft Windows Server 2016 operating system has been added. See the Genesys Info Mart page in the *Supported Operating Environment Reference* for more detailed information and a list of all supported operating systems.

New in Release 8.5.007

> **Important**
>
> Genesys Info Mart 8.5.007 requires Interaction Concentrator (ICON) 8.1.100.36 or higher. To enable all of the functionality provided in this release, Genesys Info Mart requires Interaction Concentrator release 8.1.514.06 or higher. In multimedia deployments, Genesys recommends using Interaction Concentrator release 8.1.514.11 or higher.

Release 8.5.007 introduces the following new features and functionality:

- **Deployment simplification and maintenance improvements** — The following enhancements reduce resource requirements and effort for deployment and maintenance.

  - The restrictions that each ICON application must populate its own IDB and that there must be separate IDBs for Voice and Multimedia has been relaxed. The topologies that Genesys Info Mart supports now include one ICON and one IDB for all data domains. For more information, see Supported Topologies and the new topology diagram, Multiple Data Sources per ICON: Combined Data Domains.

  - To supplement IDB maintenance improvements introduced in release 8.5.006, **Job_InitializeGIM**, **Job_ExtractICON**, and **Job_MigrateGIM** now automatically create missing IDB views as well as indexes required for the applicable DAP role(s). In addition to streamlining and expediting execution of the initialization and migration jobs, the maintenance improvements mean that missing indexes or views will not interrupt **Job_ExtractICON** by causing Genesys Info Mart to go into the migration state until IDB is updated.

    However, while it is no longer strictly necessary for users to run **update_idb_*** scripts manually, in any circumstances, there

are some situations in which you might consider doing so; for more information, see Preparing IDBs.

- A new configuration option, on-demand-migration in the **[schedule]** section, enables you to configure Genesys Info Mart to run **Job_MigrateGIM** automatically when required. Previously, Genesys Info Mart entered the migration state if the Info Mart database schema needed to be upgraded following Genesys Info Mart Server migration, and manual intervention was required in order to run **Job_MigrateGIM** to migrate the database, before ETL functioning would resume.

- **User data enhancement** — In deployments that use ICON 8.1.512.08 or higher, Genesys Info Mart now supports storage of e-mail subjects up to 1024 characters. You can also store up to 1024 characters in fields with character data types in custom user data fact tables, provided that you defined these fields correctly in the user-data template script (**make_gim_UDE_template.sql** or **make_gim_UDE_template_partitioned.sql**). Previously, the limit was 255 characters.

> ### Tip
> If you need to store e-mail subjects or custom user data values with a length greater than 255 characters, Genesys recommends that you use ICON 8.1.514.06 or later and set the ICON max-userdata-length option accordingly.

- **Unicode characters support on Microsoft SQL Server** — Genesys Info Mart support for data storage in multiple languages has been extended to Microsoft SQL Server. A new database-creation script (**make_gim_multilang.sql** or **make_gim_multilang_partitioned.sql**) uses nvarchar instead of varchar data types to enable you to take advantage of Unicode characters in Microsoft SQL Server deployments, provided that ICON and Genesys Configuration Layer components have been configured as required. For more information, see Multi-Language Support.

> ### Important
> There is no migration path from an existing Info Mart database to a Unicode one. Contact Genesys Customer Care if you need assistance with data transfer.

- **Gapless mediation reporting improvement** — In eServices deployments, instead of adjusting the durations of Interaction Queue and virtual queue MSFs to eliminate gaps in mediation reporting, Genesys Info Mart now provides additional MSFs to cover the time that a multimedia interaction is in mediation but is not in an Interaction Queue for which there is an MSF. A new configuration option, show-non-queue-mediation-mm, which replaces expand-mediation-time-for-gapless, controls whether non-queue MSFs will be created and whether all mediation time will be reported, without gaps. For more information, see the discussion about MEDIATION_DURATION on the Populating Mediation Segments page in the *Genesys Info Mart User's Guide*, as well as the extended description of the **show-non-queue-mediation-mm** option.

- **Management enhancements** — The following features enhance management of Genesys Info Mart operations:

  - Genesys Info Mart now supports the -V command-line parameter. Use this parameter to display the software version and related information, without starting Genesys Info Mart Server. You can use either an uppercase letter (*V*) or lowercase letter (*v*). For more information, see Command-Line Parameters.

  - GIM Manager now automatically refreshes the data in list views. Through **GIM Manager settings,** you can configure the way this feature operates, such as the auto-refresh frequency and idle timeout. For more information, see Using Genesys Info Mart Manager in the *Genesys Info Mart*

Operations Guide.

- If GIM Manager has no connection to the Genesys Info Mart Server, certain buttons in the interface are disabled.

New in Release 8.5.006

> **Important**
>
> Genesys Info Mart 8.5.006 requires Interaction Concentrator (ICON) 8.1.100.36 or higher. To enable all of the functionality provided in this release, Genesys Info Mart requires Interaction Concentrator release 8.1.509.07 or higher.

Release 8.5.006 introduces the following new features and functionality:

- **New user-data propagation rule** — A new user-data propagation rule, **IRF_ROUTE**, enhances the flexibility of user-data reporting with the capability to store the final KVP value that is present during mediation, regardless of whether the call is abandoned in mediation or delivered to a handling resource (where additional changes might be made to the key's value). For more information about the **IRF_ROUTE** propagation rule, including propagation rule examples, see Propagation Rules.

- **Enhanced outbound fact reporting** — In eServices outbound scenarios where an outbound interaction is created outside the scope of eServices (for example, by OCS) and placed into an Interaction Queue, and then is handled and sent by a strategy without agent involvement, an IRF record is now created to record the strategy's handling of the interaction.

- **Enhanced dialing target reporting** — For voice interactions, if the IRF row represents a resource initiating an interaction or consultation, a new column, TARGET_ADDRESS, contains the target media address that received the interaction or consultation.

- **Decreased IDB maintenance effort** — Genesys Info Mart now automatically creates missing IDB indexes during extraction, without running the **update_idb_*** scripts. For more information, see Preparing IDBs.

New in Release 8.5.005

> **Important**
>
> Genesys Info Mart 8.5.005 requires Interaction Concentrator (ICON) 8.1.100.36 or higher. To enable all of the functionality provided in this release, Genesys Info Mart requires Interaction Concentrator release 8.1.509.07 or higher.

Release 8.5.005 introduces the following new features and functionality:

- **Genesys Callback reporting** — This release introduces support for reporting on Genesys Callback activity on voice, web, or mobile channels, in deployments with Genesys Mobile Services (GMS). Genesys Info Mart support for Genesys Callback reporting is provided out-of-box.

  Callback applications provide Callback-related data that Genesys Info Mart processes and stores in dedicated CALLBACK_* tables, which were initially introduced in an earlier Genesys Info Mart release.

  Genesys Callback reporting requires Interaction Concentrator 8.1.506.07 or higher and GMS 8.5.105.12 or higher, with Genesys Callback properly configured.

  For more information about configuring GMS and ICON to enable Genesys Info Mart reporting on Callback, see Genesys Mobile Services (GMS) — for Callback.

  For information about Genesys Info Mart Callback-related tables, as well as information about changes to existing tables to support reporting on Callback, see the *Genesys Info Mart Physical Data Model* (formerly called *Reference Manual*) for your RDBMS.

  For information about how callbacks are represented in Info Mart interaction data, see Special handling for Genesys Callback in the *User's Guide*, on the page about populating interaction resource data.

- **Data export** — A new job, **Job_ExportGIM**, enables you to incrementally export data from the Info Mart database into .csv files. The job exports data from the dimensional model fact and dimension tables, including custom user data extension tables, and creates a .zip archive containing individual .csv files for each table. This Data Export functionality is available for Genesys Engage cloud deployments; contact your Genesys representative for more information.

- **Miscellaneous**:

  - This release includes additional schema changes to support reporting on interaction flows that involve applications developed with Genesys Designer. (Support for Genesys Designer is available in certain Genesys Engage cloud implementations.) In addition to the preparatory schema and configuration changes made in various earlier releases of Genesys Info Mart, the following observable changes in the 8.5.005.09 installation package are added to support functionality in a future release:

    - Additional new SDR_* dimension tables, which are defined in the **make_gim.sql** and **make_gim_partitioned.sql** scripts.

  - A new configuration option, link-vrp-vq-msf-to-irf, was added to the Genesys Info Mart application template after the initial 8.5.004 release (in release 8.5.004.09). The **link-vrp-vq-msf-to-irf** option, in the **[gim-transformation]** section, enables reporting on virtual queue data in scenarios where a nonself-service IVR port uses a virtual routing point for routing operations, and the strategy includes a virtual queue.

New in Release 8.5.004

> ### Important
>
> Genesys Info Mart 8.5.004 requires Interaction Concentrator (ICON) 8.1.100.36 or higher. To enable all of the functionality provided in this release, Genesys Info Mart requires Interaction Concentrator release 8.1.509.07 or higher.

Release 8.5.004 introduces the following new features and functionality:

- **Focus time reporting** — Genesys Info Mart now supports reporting of agent focus time. Focus time is calculated by Genesys Workspace Desktop Edition (WDE).

  Multiple interactions can be active on an agent desktop, but only one interaction has the agent's focus at any given moment. For each of an agent's active interactions, the focus time indicates the total amount of time the agent was focused on that particular interaction.

  Genesys Info Mart populates two new columns in the IRF table with focus time data: FOCUS_TIME_COUNT and FOCUS_TIME_DURATION.

To enable this functionality, you require WDE release 8.5.112.08 or higher and Interaction Concentrator release 8.1.507.06 or higher.

There are no Genesys Info Mart configuration options related to reporting the time that an interaction is in focus on an agent desktop, but you must configure settings for the following two options in other Genesys applications:

- **store-event-data** (configured in ICON)

- **reporting.case.report-case-in-focus-duration** (configured in WDE)

- **ASM engage duration reporting** — In Outbound VoIP environments, with Outbound Campaigns running in an Active Switching Matrix (ASM) dialing mode, the time that the engaged agent is waiting to be connected to the customer (ASM engage duration) is now reported separately from agent talk time, if so configured. Two new columns, ASM_COUNT and ASM_ENGAGE_DURATION, that have been added to the INTERACTION_RESOURCE_FACT (IRF) table, are populated based on the setting for the new configuration option, populate-irf-asm-engage-duration. (The default option value is false.) Genesys Info Mart requires that OCS attaches a special KVP, GSW_CALL_TYPE="ENGAGING", to identify engaging calls. The attached data specification sample, ccon_adata_spec_GIM_example.xml, that is provided with Genesys Info Mart release 8.5.004 enables ICON to capture KVPs with the GSW_CALL_TYPE key.

- **Indicating which party ended chat** — Genesys Info Mart now stores data that enables you to determine who ended a chat session. If a customer leaves the chat session before the agent, a new flag, CUSTOMER_LEFT_FIRST, is set in the ANCHOR_FLAGS dimension. The time when the customer left the chat, or the time when the agent stopped the chat session is stored in the IRF.IRF_ANCHOR_TS column. (IRF_ANCHOR_TS is the new name for the column that was called IRF_ANCHOR_SENT_TS in release 8.5.003 and IRF_ANCHOR_DATE_TIME_KEY prior to that.)

To support this functionality, Interaction Concentrator release 8.1.507.06 is required. For other prerequisites, refer to Chat Session Attributes that Indicate Who Ended the Session in the *Interaction Concentrator User's Guide*.

- **Reporting on multiple routing attempts** — In deployments with the SIP Server configuration option **divert-on-ringing** set to false, Genesys Info Mart now associates multiple routing attempts with the same mediation in scenarios when multiple attempts are made to route a call from a virtual queue. The same MEDIATION_SEGMENT_ID value is used in the IRF records for all routing attempts. The technical result of Redirected/RouteOnNoAnswer is reported for all but the last routing attempt, if the attempts were unsuccessful.

To support this functionality, you require SIP Server release 8.1.102.13 and Interaction Concentrator release 8.1.509.07. While no changes are required in Genesys Info Mart configuration, you must set the following Interaction Concentrator configuration options:

- **use-server-partyuuid** to the value of 1 (configured in either ICON Application or Switch object)

- **ring-divert** to the value of 1 (configured in either Switch or the DN object for a Routing Point)

- **Miscellaneous improvements:**

  - To minimize switchovers between IDBs and improve data quality, the extraction job now waits for more reliable data to arrive from the second ICON in an HA pair, if the available data from the first ICON is determined to be not very reliable.

  - To improve processing of user data that is attached during mediation, a new column, USERDATA_FLAG, has been added to the MEDIATION_SEGMENT_FACT table (MSF). This flag facilitates an unambiguous join between the MSF and fact extension tables to retrieve correct user data that is attached during mediation.

  - The field INTERACTION_RESOURCE_FACT.LAST_INTERACTION_RESOURCE is now supported for all media types. Previously, this field was supported only for voice interactions.

  - A new configuration option, populate-sip-im-facts, is added to the **[gim-etl-populate]** section to control the transformation of SIP Instant Messaging (IM) data.

  - In scenarios where a call is abandoned while queued in multiple parallel virtual queues, Genesys Info Mart now reports only the last-entered virtual queue as **Abandoned**. Other parallel virtual queues are reported as **Cleared/Unspecified**. Previously in such scenarios, MSF records for all

virtual queues were reported as **Abandoned**.

- Genesys Info Mart now stores data to distinguish an agent from other persons in a contact center. A newly introduced value, Person, is set in the RESOURCE_.RESOURCE_SUBTYPE column for any persons who are not agents. The previously existing value, Agent, is now used in the RESOURCE_.RESOURCE_SUBTYPE column only to identify Agents (that is, the resources for whom the IsAgent flag is set in the Person configuration object). Both subtypes are associated with the Agent resource type that is stored in the RESOURCE_.RESOURCE_TYPE column.

New in Release 8.5.003

Important

Genesys Info Mart 8.5.003 requires Interaction Concentrator (ICON) 8.1.100.36 or higher. To enable all of the functionality provided in this release, Genesys Info Mart requires Interaction Concentrator release 8.1.504.04 or higher.

Release 8.5.003 introduces the following new features and functionality:

- **Tenant metric enhancements** — This release introduces a number of enhancements that allow Tenant metrics to include active multimedia interactions that have not yet been handled:

    - Two new columns, ANCHOR_ID and ANCHOR_SDT_KEY, are added to the INTERACTION_FACT table. Values in these columns are derived as follows:

        - For interactions that have been completed or handled, Genesys Info Mart populates the value of ANCHOR_ID based on the INTERACTION_RESOURCE_ID of the INTERACTION_RESOURCE_FACT (IRF) record with IRF_ANCHOR = 1. The ANCHOR_SDT_KEY value in this case equals the START_DATE_TIME_KEY of the same IRF record.

        - For active multimedia interactions that have not yet reached a handling resource (that is, are still in mediation), Genesys Info Mart populates the value of ANCHOR_ID based on the MEDIATION_SEGMENT_ID of the MEDIATION_SEGMENT_FACT (MSF) record for the most recent mediation DN. The ANCHOR_SDT_KEY value in this case equals the START_DATE_TIME_KEY of the same MSF record.

    - Starting with this release, Genesys Info Mart creates an MSF record for the first Interaction Queue that an inbound interaction enters, even if the **populate-mm-ixnqueue-facts** configuration option is set to **false** (which is the default value). Because the MSF record for the first Interaction Queue is now always populated, Genesys Info Mart is able to specify an ANCHOR_ID for active multimedia interactions that have not yet been handled, which in turn, allows Genesys Info Mart to associate the current user data values with this active interaction while it is in mediation. Because of this change in MSF population, at least one record in either IRF or MSF table now represents an active multimedia interaction. **Note**: In deployments with **populate-mm-ixnqueue-facts = false**, custom reports might need to be modified to exclude the first Interaction Queue activity.

    - The following changes simplify configuration steps needed to take advantage of active interactions reporting in Tenant metrics:

        - Two new configuration options are added to the **[gim-etl]** section of the Genesys Info Mart Application to enable user data storage for all mediation resources. To simplify configuration, instead of configuring **link-msf-userdata** for each individual queue, it is possible to specify:

- link-msf-userdata-voice = `true` to see the user data associated with all voice mediations.

- link-msf-userdata-mm = `true` to see the user data associated with all multimedia mediations.

  The default value for these two options is **false**.

  Note: Because storing extra user data can have performance implications, Genesys recommends that you use these options only when absolutely required. In many deployments you can instead specify **link-msf-userdata** for the desired queues.

- The default value of the **expand-mediation-time-for-gapless** option, in the **[gim-transformation]** section, has been changed from **false** to **true**. This change ensures there is no gap during user data collection for mediations of active multimedia interactions that have not yet been handled.

- **Multimedia processing improvement**—Genesys Info Mart now correctly processes scenarios that include a late reply to an e-mail interaction. When a multimedia interaction that represents the reply is created after the parent interaction has already been terminated, the transformation job now processes the child interaction as a separate interaction. In this scenario, the transformation job creates a new record in the INTERACTION_FACT table with a new INTERACTION_ID value. If the parent interaction has not been terminated, the child interaction uses the same INTERACTION_ID value as the parent interaction. Previously, the metrics related to a late reply could be lost because the transformation job might have discarded the child interactions during processing.

- **Unicode characters support**—For deployments with Oracle and PostgreSQL RDBMS, this release of Genesys Info Mart adds supports for data storage in multiple languages. To take advantage of Unicode characters, the Info Mart database must be created with UTF-8 encoding. To enable this functionality on Oracle, the fields with the varchar data types now use the explicit CHAR character length semantics.

- **Reporting on Hunt Group Call Distribution**—Genesys Info Mart now supports reporting on Genesys SIP Server calls that are distributed through Hunt Groups with parallel or sequential distribution strategy. For accurate data representation, Interaction Concentrator release 8.1.504.04 or later is required.

- **Logging enhancements**:

  - Genesys Info Mart configuration check can generate two new log messages:

    - 55-20037 Configuration check failed.
      Alarm Advisory: Indicates an abnormal condition. You might consider setting an Alarm Condition for this event. Cancel event: 55-20169

    - 55-20169 Configuration check passed.
      Description: Configuration check passed, no severe issues were found

- **Purging enhancement**—The maintenance job now purges configuration fact data from GIDB and relevant fact tables. A new configuration option, days-to-keep-cfg-facts, sets the retention policy for configuration fact data.

- **Visibility of Aggregation status** — For deployments that include Reporting and Analytics Aggregates (RAA), Genesys Info Mart Manager (GIM Manager) now displays Aggregation latency in the ETL status view.
  Note: This feature requires the new type of data storage available in RAA release 8.1.400.23 or later (aggregate data formerly stored in tables with the prefix AG2_*, is now stored in tables with the prefix AGT_*, and presented through views with the prefix AG2_*).

- **Miscellaneous:**

  - Extraction job performance has been improved in the area of merge for voice interactions.

  - New combinations in the TECHNICAL_DESCRIPTOR table are added for multimedia online interactions that are placed into archive queues.

- For the deployments that rely on Genesys Info Mart for reporting on Post-Call Survey user data, two new scripts are added to the Genesys Info Mart installation package:

  - `make_gim_post_call_survey.sql` —for use with nonpartitioned databases

  - `make_gim_post_call_survey_partitioned.sql`—for use with partitioned databases

  Run the appropriate script manually if your deployment uses Post-Call Survey functionality.

- The Application object settings for the following configuration options can now be overridden at the level of individual supported objects:

  - **q-short-abandoned-threshold-voice**—You can now set this value at the Switch or DN (for Virtual Queues or ACD Queues) object level.

  - **q-short-abandoned-threshold**—You can now set this value at the Switch, DN (for Virtual Queues), or Script (for Interaction Queues or Workbin) object level.

- A new column, CREATE_AUDIT_KEY, has been added to the SM_MEDIA_NEUTRAL_STATE_FACT table.

- To accommodate additional custom record fields with high cardinality values, 20 new columns (RECORD_FIELD_41 through RECORD_FIELD_60) of the varchar data type are added to the CONTACT_ATTEMPT_FACT table.

- In the INTERACTION_RESOURCE_FACT table, the name of the IRF_ANCHOR_DATE_TIME_KEY column is changed to IRF_ANCHOR_SENT_TS. This field is now populated with the time when the first response left the contact center (the TERMINATED_TS value of the first successful reply). This field is populated only if IRF.IRF_ANCHOR has a value of 2; otherwise the field has a value of NULL.

- Subsequent to the changes that were originally introduced in release 8.1.402, this release includes additional schema changes to prepare for support of additional interaction flows, such as the Voice Callback feature of Genesys Mobile Services.

  - PUSH_DELIVERY_CONFIRMED_TS field has been added to the CALLBACK_FACT table.

  - CUSTOMER_READY_TO_START_IXN_TS field has been added to the CALLBACK_FACT table.

  - DESIRED_TIME field in the CALLBACK_FACT table has been renamed to DESIRED_TIME_TS.

  - A constraint, NOT NULL, has been added for the DESIRED_TIME_TS field (with a default value of 0).

- **Supported Environments**:

  - This release adds support for Java version 8.0.

  - This release adds support for Red Hat Enterprise Linux AP 64 bit x86 7.

New in Release 8.5.002

> ## Important
> Genesys Info Mart 8.5.002 requires Interaction Concentrator (ICON) 8.1.100.36 or higher. To enable all of the functionality provided in this release, Genesys Info Mart requires Interaction Concentrator release 8.1.500.04 or higher.

Release 8.5.002 introduces the following new features and functionality:

- **Reporting on media-neutral agent states** — Genesys Info Mart now optionally reports the summarized states for each agent across all media—referred to as media-neutral agent states. To populate media-neutral agent states, Genesys Info Mart takes already transformed summarized states for each media as the source data. The highest-priority state in effect for any of the agent's media is reported as the media-neutral state for the agent. An existing configuration option, **sm-resource-state-priority**, controls priority of agent states relative to each other. A new configuration option, populate-media-neutral-sm-facts in the **[gim-etl-populate]** configuration section, which is set to `false` by default, controls reporting on media-neutral agent states. A new fact table, SM_MEDIA_NEUTRAL_STATE_FACT, stores the media-neutral agent states.

- **Gapless mediation reporting** — In eServices deployments in which routing activities are performed without the use of Virtual Queues, an optional capability allows you to report on routing activities without gaps in mediation time. For Genesys Info Mart to include the time at a Routing Strategy into the mediation duration of the appropriate MEDIATION_SEGMENT_FACT record, you must set the new expand-mediation-time-for-gapless option, in the **[gim-transformation]** section, and the previously available **populate-mm-ixnqueue-facts** option, in the **[gim-etl-populate]** section, to `true`.

- **Enhanced visibility of ETL status** — Genesys Info Mart now provides information about latency for each functional area. Latency, which is expressed in the hh:mm:ss format, reflects the time elapsed since the occurrence of the last contact center event for which reporting data has been successfully stored in the Info Mart database. Use Genesys Info Mart Manager release 8.5.0 to view these details.

- **Call Detail Record data reporting** — Genesys Info Mart now provides Call Detail Record (CDR) data. You can access CDR data using a new database view, CDR, which is created within the Info Mart database schema, to conveniently research the call volume or look for specific records by ID. In a multi-tenant configuration environment, you can also create tenant views on top of the CDR view.

- **New user-data propagation rule** — A new user-data propagation rule, **IRF_INITIAL**, enhances the flexibility of user-data reporting with the capability to store the KVP value that is associated with the interaction when the interaction enters the resource that is the subject of the IRF or MSF record.

- **Miscellaneous:**

  - New configuration options, **expand-mediation-time-for-gapless** and **populate-media-neutral-sm-facts** have been added to the Genesys Info Mart application template, in the **[gim-etl-populate]** and **[gim-transformation]** sections, respectively.

  - New CDR and CDR_DATE_TIME views have been added to the **make_gim.sql** and **make_gim_partitioned.sql** scripts.

New in Release 8.5.001

> **Important**
> Genesys Info Mart 8.5.001 requires Interaction Concentrator (ICON) 8.1.000.24 or higher. To enable all of the functionality provided in this release, Genesys Info Mart requires Interaction Concentrator release 8.1.500.04 or higher.

The initial 8.5.001 release introduces the following new features and functionality:

- Support for reporting on additional interaction scenarios:

  - **Introduced Transfer** — In voice deployments with business processes that require a transferring agent to introduce the customer to another agent before transferring the call, a new configuration option, introduced-transfer-threshold in the **[gim-transformation]** section, enables you to specify a time threshold for a conference. If the conference initiator's participation in the conference is less than the threshold, while the receiving agent continues on the call, Genesys Info Mart treats this call flow as a special case of transfer. **[+] Tell me more**

    The default value, which is consistent with legacy behavior, means that Genesys Info Mart will treat this call flow as a short conference, which the initiating agent happens to leave first. In this case, the IRFs for the conference part of the receiving and introducing agents' activity will have the usual technical descriptor combinations and metrics for conferences.

    When the option is set and a conference qualifies as an introduced transfer, new technical descriptor combinations, using a role reason or result reason of IntroducedTransfer, identify IRFs for introduced transfer. The new combinations parallel the existing technical descriptors for transfers and conferences. See Technical Descriptor Combinations in the *Genesys Info Mart User's Guide* for details.

    Similarly, when the option is set, IRF metrics for the agents accrue as they do for transfers — for example, there will be no CONF_INIT metrics for the initiating agent, while the receiving agent will have POST_CONS_XFER (for two-step transfer) or base (for single-step transfer) metrics instead of CONF_JOIN ones.

    Genesys Info Mart supports both single-step and two-step introduced transfers, but support for single-step introduced transfers is limited to deployments in which ICON 8.1.500.04 or higher supports single-step conference (see the *Interaction Concentrator 8.1.x Release Note*).

  - **Chat Consultation** — In eServices deployments with agent desktop applications, such as Workspace Desktop Edition (formerly Interaction Workspace [IWS]), that offer a chat consultation feature by setting a visibility mode on the conference request, Genesys Info Mart can now distinguish whether an agent is being invited into a chat interaction for a conference (visibility mode = 1) or for a consultation (visibility mode = 3). **[+] Show resulting reporting changes**

    Resulting reporting changes for a chat consultation include:

    - The IRF for the receiving agent now has a resource role of ReceivedConsult, instead of InConference. Previously, ReceivedConsult applied only for voice or offline media types.

    - CONS_INIT_TALK_COUNT now indicates the number of chat consultations initiated by the IRF resource. Therefore, for the chat media type, CONS_INIT_TALK_COUNT can be greater than 1. In fact, the CONF_INIT and CONS_INIT counts for an agent can both be greater than 1, indicating that the agent initiated multiple chat conferences and consultations.

    - So as not to suggest that the consultation time implies talk time away from the customer, there is no CONS_INIT_TALK_DURATION in the initiating agent's IRF and no InitiatedConsult IRF for the agent.

  - To report on chat consultation, Genesys Info Mart requires a minimum ICON release of 8.1.500.04, which introduced support for visibility mode.

  - **Chat Conference or Consultation through a Queue** — In eServices deployments with agent desktop applications, such as Workspace Desktop Edition, that use subordinate auxiliary interactions to implement a chat conference or consultation through a queue, Genesys Info Mart blends the main and auxiliary interactions to present a simplified reporting result. Previously, Genesys Info Mart reported fully on the internal handshaking and other subordinate interactions, which are not significant for reporting.

    A new interaction subtype, InternalConferenceInvite, which the agent desktop application uses to identify the subordinate interactions, supports this functionality.

    Support for reporting on chat consultation through a queue requires ICON 8.1.500.04 or higher.

- **Multimedia performance improvements** — To improve performance in multimedia deployments that do not need to track interaction threads, a new configuration option, populate-thread-facts in the **[gim-etl-populate]** section, controls whether thread-related metrics will be populated. The default value (false) is a change in behavior compared with releases since Genesys Info Mart 8.1.101.04.

  When **populate-thread-facts** = false, the FIRST_*_THRD fields in the ANCHOR_FLAG dimension will be ignored for the purposes

of populating the IRF.ANCHOR_FLAGS_KEY metric. In deployments that use Reporting and Analytics Aggregates (RAA) or Genesys CX Insights (GCXI, which replaces Genesys Interactive Insights [GI2]), related agent thread metrics (for example, AG2_ID_*.ACCEPTED_THREAD) are also not populated.

- **Operating system changes** — Support for the following operating systems has been discontinued:

  - HP-UX (all versions)

  - IBM AIX 5.3

  - RedHat Enterprise Linux 4

  - Solaris/SPARC version 9

  - Windows Server 2003

  For full information about operating system and RDBMS support, see the *Genesys Supported Operating Environment Reference Guide*.

- **Miscellaneous:**

  - Schema changes — Schema changes related to user-data fact and dimension tables support improved performance by downstream reporting applications and assist in exporting and archiving data. For more information, see the "New in Release 8.5.001" information in the *Genesys Info Mart 8.5.0 Reference Manual* for your RDBMS (for example, New in Release 8.5.001 in the Microsoft SQL Server document).

  - This release includes schema and configuration changes to prepare Genesys Info Mart to support reporting on interaction flows that involve applications developed with Genesys Designer. In addition to the preparatory schema and configuration changes for additional interaction flows that were described in the release note for Genesys Info Mart 8.1.402.07, the following observable changes in the 8.5.001 installation package are added to support functionality in a future release:

    - New SDR_* fact and dimension tables, which are defined in the **make_gim.sql** and **make_gim_partitioned.sql** scripts.

    - A new configuration section, **[elasticsearch-sdr0],** with a new configuration option, **client,** in the Genesys Info Mart application template.

    - A new configuration file, **EsConfiguration.xml,** to map rules for transformation.