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# Genesys Info Mart Physical Data Model for a PostgreSQL Database

Table INTERACTION\_FACT

# Table INTERACTION\_FACT

## Description

**Modified:** 8.5.015.19 (PRODUCER\_BATCH\_ID added); 8.5.007 (SUBJECT data type extended from 255 to 1024 characters); 8.5.003 (ANCHOR\_ID and ANCHOR\_SDT\_KEY added); 8.5.003 (in Oracle, fields with VARCHAR data types use explicit CHAR character-length semantics)

In partitioned databases, this table is partitioned.

This table represents the interaction from the perspective of a customer experience. The grain of the fact is an accumulating snapshot that summarizes facts that are related to a given interaction.

For multimedia interactions, the grain of the fact is the same as for voice interactions in the majority of cases. A new INTERACTION\_FACT row is generated for:

- Each new root interaction (identified by a unique ROOTIRID)
- Each new inbound interaction, even if this interaction is associated with an existing root interaction (has the same ROOTIRID value) as could be the case with an inbound customer reply interaction
- A late outbound reply (a multimedia interaction representing an e-mail reply that is created after the parent interaction has already been terminated)

### Tip

To assist you in preparing supplementary documentation, click the following link to download a comma-separated text file containing information such as the data types and descriptions for all columns in this table: [Download a CSV file.](#)

**Hint:** For easiest viewing, open the downloaded CSV file in Excel and adjust settings for column widths, text wrapping, and so on as desired. Depending on your browser and other system settings, you might need to save the file to your desktop first.

## Column List

## Legend

Column	Data Type	P	M	F	DV
INTERACTION_ID	numeric(19)	X	X		
TENANT_KEY	integer		X	X	
INTERACTION_TYPE_KEY	integer		X	X	
MEDIA_TYPE_KEY	integer		X	X	
MEDIA_SERVER_ROOM_KEY	numeric(20)				
MEDIA_SERVER_I_XNUM	numeric(20)				
MEDIA_SERVER_ROOT_CHAN_ID	varchar(50)				
MEDIA_SERVER_I_XVARCH	varchar(50)				
SOURCE_ADDRESS	varchar(255)				
TARGET_ADDRESS	varchar(255)				
SUBJECT	varchar(1024)				
STATUS	smallint		X		0
START_TS	integer				
END_TS	integer				
START_DATE_TIME_KEY	integer		X	X	
END_DATE_TIME_KEY	integer			X	
CREATE_AUDIT_KEY	numeric(19)		X	X	
UPDATE_AUDIT_KEY	numeric(19)		X	X	
ANCHOR_ID	numeric(19)				
ANCHOR_SDT_KEY	integer			X	
ACTIVE_FLAG	numeric(1)				
PURGE_FLAG	numeric(1)				
PRODUCER_BATCH_ID	numeric(19)				

## INTERACTION\_ID

The primary key of this table. One interaction fact can contain multiple calls, represented by the underlying interaction resource facts, because of consultations, transfers, and so forth.

## TENANT\_KEY

The surrogate key that is used to join the TENANT dimension to the fact tables.

## INTERACTION\_TYPE\_KEY

The surrogate key that is used to join the INTERACTION\_TYPE dimension to the fact tables.

## MEDIA\_TYPE\_KEY

The surrogate key that is used to join the MEDIA\_TYPE dimension to the fact tables.

## MEDIA\_SERVER\_ROOT\_IXN\_ID

If an interaction belongs to a thread but is not the root interaction of the thread, this field indicates the interaction ID of the root interaction in the thread; otherwise, this field is null. This value might not be unique.

**Note:** A configuration option, **max-thread-duration-after-inactive-in-days**, affects the definition of a thread in Genesys Info Mart, and, therefore, affects how this field is set. If a new interaction is a continuation of an old thread that has already expired (because of the configuration option), then Genesys Info Mart does not consider the interaction to be the continuation of a thread; instead, the interaction is considered to be the beginning (root) of a new thread. As such, this field will be null for the new interaction, and subsequent continuations of the new thread will refer to this interaction as the root interaction.

## MEDIA\_SERVER\_IXN\_ID

The interaction ID, as reported by the interaction media server for the first call in the interaction. In the case of voice interactions, the ID is the numeric version of the hexadecimal T-Server Conn ID. This field is not populated for multimedia.

T-Server constructs the connection ID from its server ID and the timestamp of T-Server startup. As a general rule, this ID is unique, but it is theoretically possible that it might not be — for example, if there are two T-Servers in the same deployment incorrectly configured with the same server ID, and the two T-Servers started at around the same time.

## MEDIA\_SERVER\_ROOT\_IXN\_GUID

If an interaction belongs to a thread but is not the root interaction of the thread, this field indicates the root interaction GUID that represents the original interaction in the thread, as reported by the interaction media server and ICON; otherwise, this field is null. This value might not be unique.

**Note:** A configuration option, **max-thread-duration-after-inactive-in-days**, affects the definition of a thread in Genesys Info Mart, and, therefore, affects how this field is set. If a new interaction is a continuation of an old thread that has already expired (because of the configuration option), then Genesys Info Mart does not consider the interaction to be the continuation of a thread; instead, the interaction is considered to be the beginning (root) of a new thread. As such, this field will be null for the new interaction; however, subsequent continuations of the new thread will still refer to the original root interaction GUID, as reported by ICON.

## MEDIA\_SERVER\_IXN\_GUID

The interaction GUID, as reported by the interaction media server. This GUID might not be unique. In the case of T-Server voice interactions, the GUID is the Call UUID. In the case of multimedia, the GUID is the Interaction ID from Interaction Server.

## SOURCE\_ADDRESS

The source media address that initiated the interaction, such as ANI for voice media or the From e-mail address for multimedia. This value may represent a network resource address.

## TARGET\_ADDRESS

The target media address that received the interaction, such as DNIS for voice media. This field is not populated for multimedia interactions because there can be multiple target addresses. This value may represent a network resource address.

## SUBJECT

**Modified:** 8.5.007 (data type extended from 255 to 1024 characters)  
The subject of the primary media server interaction.

## STATUS

**Modified:** 8.5.001 (error code 26 added)  
Transformation status of the interaction fact data. This field is set to one of the following values:

- 0 — No errors were encountered.
- 1 — An unspecified error was encountered.
- 2 — An unexpected error occurred during data transformation for the INTERACTION\_RESOURCE\_FACT table.
- 3 — The G\_IS\_LINK table is missing data about either an outgoing (source) or an incoming (target) multi-site call.
- 4 — The G\_IS\_LINK includes data about multiple incoming (target) multi-site calls that have the same IS-Link value.
- 5 — The G\_IS\_LINK includes data about multiple outgoing (source) multi-site calls that have the same IS-Link value.
- 6 — The G\_IS\_LINK includes data about multiple (more than two) bidirectional multi-site calls (most likely, because the data source for the call data was a T-Server of a release prior to 8.0).
- 7 — The CALLID value that is specified in IS\_LINK does not match the CALLID in IS\_LINK\_HISTORY.
- 8 — The value of the IPurpose key is not a number.
- 9 — The G\_PARTY\_HISTORY table contains no record with ChangeType = 1 ("party\_created") for a certain

## Table INTERACTION\_FACT

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party.

- 10 — The G\_PARTY\_HISTORY table contains multiple records with ChangeType = 1 ("party\_created") for the same party.
- 11 — The record in the G\_PARTY table refers to a nonexistent parent record.
- 12 — The call sequence cannot be established, because a party that is a source of the multi-site call cannot be found. (In other words, a party cannot be identified for this multi-site call that represents a called party in a source call, that either redirected or routed the call to an external site, or initiated a single-step transfer to an external site.)
- 13 — The record in the GO\_CAMPAIGN table refers to a nonexistent group ID.
- 14 — The cycle was found in the results of the IRF transformation.
- 15 — Merge processing discarded a stuck G\_CALL record.
- 16 — Merge processing discarded a stuck G\_IR record.
- 17 — A negative duration was detected during IRF, MSF, or IRSF transformation.
- 18 — The value of the ServiceObjective KVP is not a number.
- 19 — The record in the G\_CALL table refers to a nonexistent call.
- 20 — A history record with the change type of terminated is followed by another history record for the same party.
- 21 — The value of the VQID in the G\_ROUTE\_RESULT table is not unique.
- 22 — The value of the VQID in the G\_VIRTUAL\_QUEUE table is not unique.
- 23 — The value of the MEDIATION\_SEGMENT\_ID in transformation results is not unique.
- 24 — The value of the PARTYGUID in transformation results is not unique.
- 25 — No parties are detected as being associated with this call.
- 26 — Value validation failed during UserEvent transformation or ElasticSearch transformation.

## START\_TS

The UTC-equivalent value of the date and time at which the interaction began.

## END\_TS

The UTC-equivalent value of the date and time at which the interaction ended, including any ACW time. If ACW occurs, the record is updated after ACW completes, which might happen in a subsequent ETL cycle.

## START\_DATE\_TIME\_KEY

Identifies the start of a 15-minute interval in which the interaction started. Use this value as a key to join the fact tables to any configured DATE\_TIME dimension, in order to group the facts that are related to the same interval and/or convert the START\_TS timestamp to an appropriate time zone.

## END\_DATE\_TIME\_KEY

Identifies the start of a 15-minute interval in which the interaction ended. Use this value as a key to join the fact tables to any configured DATE\_TIME dimension, in order to group the facts that are related to the same interval and/or convert the END\_TS timestamp to an appropriate time zone.

## CREATE\_AUDIT\_KEY

The surrogate key that is used to join to the CTL\_AUDIT\_LOG control table. The key specifies the lineage for data creation. This value can be useful for aggregation, enterprise application integration (EAI), and ETL tools — that is, applications that need to identify newly added data.

## UPDATE\_AUDIT\_KEY

The surrogate key that is used to join to the CTL\_AUDIT\_LOG control table. The key specifies the lineage for data update. This value can be useful for aggregation, enterprise application integration (EAI), and ETL tools — that is, applications that need to identify recently modified data.

## ANCHOR\_ID

**Introduced:** Release 8.5.003

Identifies the fact (IRF or MSF) that can be considered the current anchor for this interaction in relevant reports. Since multimedia interactions are populated while they are still active, some reports might capture a multimedia interaction before it reaches a handling resource, and later reports might capture the interaction after it has reached a handling resource.

This field is populated as follows:

- For voice interactions and for multimedia interactions that have been handled, the value of ANCHOR\_ID is based on the INTERACTION\_RESOURCE\_ID of the INTERACTION\_RESOURCE\_FACT (IRF) record with IRF\_ANCHOR = 1.
- For active multimedia interactions that have not yet reached a handling resource (that is, are still in mediation), the value of ANCHOR\_ID is based on the MEDIATION\_SEGMENT\_ID of the MEDIATION\_SEGMENT\_FACT (MSF) record for the most recent mediation DN.

## ANCHOR\_SDT\_KEY

**Introduced:** Release 8.5.003

The START\_DATE\_TIME\_KEY value of the fact (IRF or MSF) that is identified by ANCHOR\_ID.

This field is populated as follows:

- For voice interactions and for multimedia interactions that have been handled, the value of ANCHOR\_SDT\_KEY equals the START\_DATE\_TIME\_KEY of the IRF identified by ANCHOR\_ID.
- For active multimedia interactions that have not yet reached a handling resource (that is, are still in mediation), the value of ANCHOR\_SDT\_KEY equals the START\_DATE\_TIME\_KEY of the MSF identified by

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ANCHOR\_ID.

### ACTIVE\_FLAG

Indicates whether the interaction is currently active: 0 = No, 1 = Yes.

### PURGE\_FLAG

This field is reserved.

### PRODUCER\_BATCH\_ID

**Introduced:** Release 8.5.015.19  
Reserved for internal use.

## Index List

CODE	U	C	Description
I_IF_SDT			Improves access time, based on the Start Date Time key.
I_IF_CID			Improves access time, based on the Call ID.

### Index I\_IF\_SDT

Field	Sort	Comment
START_DATE_TIME_KEY	Ascending	

### Index I\_IF\_CID

Field	Sort	Comment
MEDIA_SERVER_IXN_GUID	Ascending	

## Subject Areas

- **Facts** — Represents the relationships between subject area facts.

## Table INTERACTION\_FACT

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- **Interaction** — Represents interactions from the perspective of a customer experience.