Genesys Info Mart Physical Data Model for a Microsoft SQL Server Database

Table SM_RES_STATE_FACT

3/27/2025

Table SM_RES_STATE_FACT

Description

Modified: 8.5.015.19 (PRODUCER_BATCH_ID added)

In partitioned databases, this table is partitioned.

Each row describes a summarized state of an agent resource, relative to a given media type. The grain of the fact is an accumulating snapshot that represents the duration of the summarized state.

A summary state represents the contiguous duration that an agent resource is logged in with a particular state for a given media type, irrespective of the number of DNs and/or queues to which the agent resource logs in. For voice, the summary state is chosen from among the concurrent states of all voice DNs to which the agent is logged in, based on the configured state priority list. For multimedia, there are no DNs, so that the summarized state represents the state of the agent, relative to the media type. Both active and completed resource states are written to this table.

Do Not Disturb is optionally factored into summary states, based on the configuration of the underlying Switch object.

The start and end dates and times for both voice and multimedia agent states are stored as facts, in seconds that have elapsed since January 1, 1970. They are also stored as DATE_TIME dimension references.

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
SM_RES_STATE_FACT_KEY	numeric(19)	X	X		
START_DATE_TIME_KEY	int		X	X	
END_DATE_TIME_KEY	int		X	X	
TENANT_KEY	int		X	X	
MEDIA_TYPE_KEY	int		X	X	
RESOURCE_KEY	int		X	X	
RESOURCE_GROUP_COMBINATION_KEY	int		X	X	
PRIMARY_MEDIA_RESOURCE_KEY	int		X	X	
RESOURCE_STATE_KEY	int		X	X	
CREATE_AUDIT_KEY	numeric(19)		X	X	
UPDATE_AUDIT_KEY	numeric(19)		X	X	
SM_RES_SESSION_FACT_SDT_KEY	int			X	
SM_RES_SESSION_FACT_KEY	numeric(19)			X	
START_TS	int				
END_TS	int				
START_MSEC	numeric(19)				
END_MSEC	numeric(19)				
TOTAL_DURATION	int				
LEAD_CLIP_DURATION	int				
TRAIL_CLIP_DURATION	int				
ACTIVE_FLAG	numeric(1)				
PURGE_FLAG	numeric(1)				
PRODUCER_BATCH_ID	numeric(19)				

SM_RES_STATE_FACT_KEY

The primary key of this table. This value is generated by the database. This key determines the state sequence in the scenario when more than one state occur within a period of one second for the same agent on the same media.

START_DATE_TIME_KEY

Identifies the start of a 15-minute interval in which the resource state began. 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 resource state 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.

TENANT_KEY

The surrogate key that is used to join this table to the TENANT dimension, to identify a specific tenant to which the agent belongs.

MEDIA_TYPE_KEY

The surrogate key that is used to join records in this table to a specific media type in the MEDIA_TYPE dimension.

RESOURCE_KEY

The surrogate key that is used to join this table to the RESOURCE_ dimension, to identify a specific agent that is associated with the agent state.

RESOURCE_GROUP_COMBINATION_KEY

The surrogate key that is used to join records in this table to a specific combination of resource groups in the RESOURCE_GROUP_COMBINATION dimension. This field identifies the groups in which the agent was a member when the resource state began. This field references the default "No Group" (-2) value if the mediation DN does not belong to a group. This field references the "UNKNOWN" (-1) value for the records associated with a discarded group combination.

PRIMARY_MEDIA_RESOURCE_KEY

The surrogate key that is used to join the RESOURCE_ dimension to the fact tables, to identify the agent's DN that first transitioned into this summary state. For multimedia, this field references the default "No Resource" (-2) dimension value. For deployments in which agents log in to multiple voice DNs concurrently, this field cannot be used for reporting because it can change with each state. It is primarily intended for data-lineage purposes.

RESOURCE_STATE_KEY

The surrogate key that is used to join this table to the RESOURCE_STATE dimension, to identify the specific resource state of this record.

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.

SM_RES_SESSION_FACT_SDT_KEY

The value of the START_DATE_TIME_KEY field of the record in the SM_RES_SESSION_FACT table. On a partitioned database, SM_RES_SESSION_FACT_SDT_KEY in combination with SM_RES_SESSION_FACT_KEY forms a value of the composite primary key for the SM_RES_SESSION_FACT table.

SM_RES_SESSION_FACT_KEY

The value of the primary key of the SM_RES_SESSION_FACT table. This surrogate key is used to join records in this table to the SM_RES_SESSION_FACT table, to associate the summarized state of the resource with the summarized login session.

START_TS

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

END_TS

The meaning depends on the value of ACTIVE_FLAG. For an inactive row, this field represents the UTC-equivalent value of the date and time by which the resource state ended. This value results from calculation of the summarized resource state and does not necessarily match the END_TS value in the underlying GIDB table(s). For an active row, this value represents a UTC-equivalent value of the date and time far in the future, so that applications do not have to test for null.

START_MSEC

The value of the START_TS field provided with millisecond precision.

END_MSEC

The value of the END_TS field provided with millisecond precision.

TOTAL_DURATION

The total duration, in seconds, of the resource state, irrespective of the interval(s) in which the resource state occurs.

LEAD_CLIP_DURATION

For resource states that span multiple time intervals, this field facilitates the aggregation of interval aggregates by providing the lead duration, in seconds, of the resource state, which is measured from the start of the resource state to the end of the first interval.

TRAIL_CLIP_DURATION

For resource states that span multiple time intervals, this field facilitates the aggregation of interval aggregates by providing the trailing duration, in seconds, of the resource state, which is measured from the start of the last interval to the end of the resource state.

ACTIVE_FLAG

Indicates whether the resource state is currently active: 0 = No, 1 = Yes. For completed states, this value is 0.

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_RSSF_SDT			Improves access time,

CODE	U	C	Description
			based on the Start Date Time key.
I_RSSF_RMESSSR			Improves access time.

Index I_RSSF_SDT

Field	Sort	Comment
START_DATE_TIME_KEY	Ascending	

Index I_RSSF_RMESSSR

Field	Sort	Comment
RESOURCE_KEY	Ascending	
MEDIA_TYPE_KEY	Ascending	
END_MSEC	Ascending	
START_MSEC	Ascending	
START_DATE_TIME_KEY	Ascending	
SM_RES_STATE_FACT_KEY	Ascending	
RESOURCE_STATE_KEY	Ascending	

Subject Areas

- Facts — Represents the relationships between subject area facts.
- Summary_Resource_State — Represents agent resource states, summarized to the media type.