Mitel MiContact Center Enterprise

CALL DETAIL TABLE SCHEMA - DESCRIPTION

Release 9.4

Mitel®

NOTICE

The information contained in this document is believed to be accurate in all respects but is not warranted by Mitel Networks™ Corporation (MITEL®). The information is subject to change without notice and should not be construed in any way as a commitment by Mitel or any of its affiliates or subsidiaries. Mitel and its affiliates and subsidiaries assume no responsibility for any errors or omissions in this document. Revisions of this document or new editions of it may be issued to incorporate such changes.

TRADEMARKS

MiContact Center Enterprise Call Detail Table Schema - Description
Release 9.4 – March 2020

INTRODUCTION

The Call Detail Table of the MiCC Enterprise database stores all events of every call archived by the Archive Service. These events, which are also known as Call Detail Data, are generated during the lifespan of a call and may include events such as Call entered Service Access, Call entered Service Group, Call routed to an agent and so on.

Call Detail Data can be accumulated at an expeditious rate. For example, if an average call generates eight events during its lifespan, and assuming a total of 1000 calls per day, 8000 events will be saved to the Call Detail Table every day; this implies that the size of the Call Detail Table will easily grow to an unmanageable size. To alleviate any potential performance problems, use the MiCC Enterprise Database Maintenance Utility to back up/delete the activity/call detail data from the SQL database.

CALL DETAIL TABLES

In order to manage Call Detail Data efficiently, four types of Call Detail Tables are generated on a daily basis:

- •cdr_at_<date of data>_act table
- •cdr_cn_<date of data>_act table
- •cdr_ty_<date of data>_act table
- •cdr_sms_<date of data>_act table
- •cdr_id table

See the figure below for an overview of the relationship among these tables:

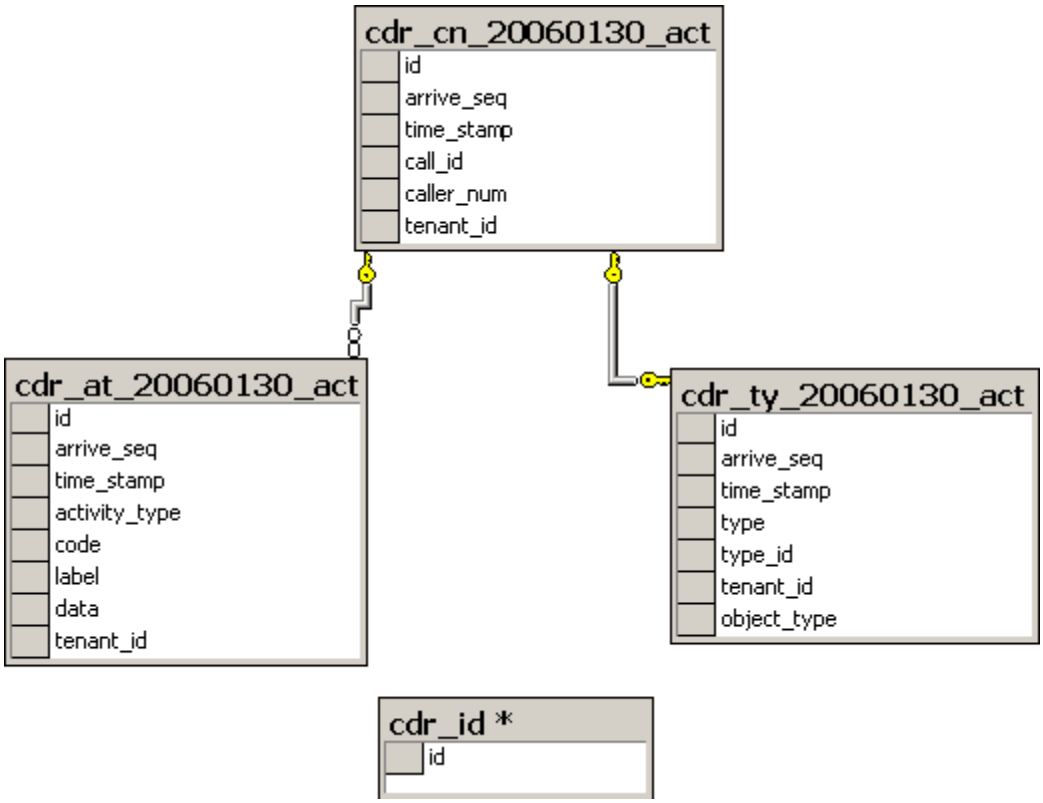

Figure 1: Table overview

The Column “id” for each table is a non-unique index that references to each other.

Also, the cdr_id Table has only one column (“id”) and one row. It is accessed and updated by the Archive Service only. When cdr_id Table is created the very first time, the “id” is initialized to 0.

CDR_AT_<DATE OF DATA>_ACT TABLE

This table contains the activity type of each call.

COLUMN NAME	DATA TYPE
id	* int
arrive_seq	* smallint
time_stamp	datetime
activity_type	smallint
code	Int
label	varchar(20) (NULL)
data	varchar(38) (NULL)
tenant_id	int

Note:
* id + arrive_seq = Primary Key
NULL = no data, applies to the code, label and data columns.
tenant_id = Foreign Key to tenant_param

CDR_CN_<DATE OF DATA>_ACT TABLE

This table contains the caller numbers of each call.

Note: There may be certain call scenarios where multiple caller numbers must be stored, therefore a unique record consists of the id and arrive_seq.

COLUMN NAME	DATA TYPE
id	* int
arrive_seq	* smallint
time_stamp	datetime
call_id	int
caller_num	varchar(24)
tenant_id	int
media_type	int

Note:
* id + arrive_seq = Foreign Key to cdr_at_yyyymmdd
id + arrive_seq must be unique
tenant_id = Foreign Key to tenant_param

CDR_TY_<DATE OF DATA>_ACT TABLE

This table contains the associated objects of each call. Objects such as agents, service groups, service accesses and call qualification codes may be associated to activities in each call. The object_type column contains the type of object and type_id is the ID of the associated object. See the Object Types table later in this document.

COLUMN NAME	DATA TYPE
id	* int
arrive_seq	* smallint
time_stamp	datetime
type	smallint
type_id	int
tenant_id	int
object_type	int

Note:
* id + arrive_seq = Foreign Key of cdr_at_yyyymmdd_act
tenant_id = Foreign Key to tenant_param

CDR_SMS_<DATE OF DATA>_ACT TABLE

This table contains archived sms cdr entries.

COLUMN NAME	DATA TYPE
id	* int
arrive_seq	* smallint
time_stamp	datetime
call_id	int
sms_data	varchar(256)
tenant_id	int

Note:
* id + arrive_seq = Foreign Key to cdr_at_yyyymmdd
id + arrive_seq must be unique
tenant_id = Foreign Key to tenant_param

CDR_ID TABLE

This table contains the latest value of the CDR tables index and has at all times only one column and one row.

COLUMN NAME	DATA TYPE
id	int

STORED PROCEDURE

MiCC Enterprise provides a stored procedure, **stp_call_details_data**, that can be used to retrieve Call Detail Data for a specified date or date and time. Once these data are retrieved, they can be used by external applications for call detail analysis so that configurations for advanced reporting or routing can be accomplished. The stored procedure can only be accessed by the SQL Administrator.

If no parameter is provided, information on how to use this stored procedure, as well as the dates for which Call Detail Data are available in the database, will be displayed.

From the Query window of the SQL Enterprise Manager, run the stored procedure using the following parameters:

stp_call_details_data 'WhichDate', GMT_OffsetHours, 'FromTime', 'ToTime'

where

'WhichDate' is the date provided for the Call Details search. The input format is **yyyymmdd**. This is a required parameter.

GMT_OffsetHours is the difference between local time and GMT (Greenwich Mean Time) in number of hours (-12 to 12). This parameter is needed so that the stored procedure can display the date from GMT to the desired local time. "0" is the default value and denotes that the timestamp shown is in GMT. If you are not sure of the value to input, refer to the value on the **Time Zone** tab of the **Date/Time Properties** dialogue box, which is accessed via the Control Panel.

'FromTime' is the Starting Time of the search period (in minutes). The input format is **hh:mm:ss**. Default is 00:00:00.

'ToTime' is the Ending time of the search period (in minutes). The input format is **hh:mm:ss**. Default is 23:59:59.

Note: If neither 'FromTime' nor 'ToTime' is provided, the search period will be defaulted to '00:00:00' to '23:59:59' (the entire day).

Examples:

stp_call_details_view '20060130', -8 denotes Local Time is GMT - 8 hrs.; default to be the entire day of January 30th, 2006.

stp_call_details_view '20060130', 3, '8:30', '17:00' denotes Local Time is GMT + 3 hrs.; search

between 8:30:00am to 5:00:00pm on January 30th, 2006.

ACTIVITY TYPE

Refer to the following table for the activity represented by each activity_type value:

ACTIVITY_TYPE VALUE	ACTIVITY
1	Call entered Service Access
2	Played message
3	Collected digits
4	Call entered Service Group
5	User selection
6	Call routed to an agent
7	Call overflowed
8	Call ringing
9	Call talking
10	Call parked
11	Call clerical
12	Call Qualification Code
13	Call completed
14	Transferred
15	Call abandoned
16	Play Message failed
17	IVR data
18	Call rejected
19	Callback rejected
20	Callback
21	Call setup for callback
22	Callback failed
23	Conferenced
24	Call routed to the default destination
25	Call diverted from Service access to other destination
26	Calling party transferred. New calling number is provided.
28	Agent clerical time started.
29	Agent clerical time ended.
30	Agent forced not ready due to diverted.
31	Agent forced not ready due to busy.
32	Agent forced not ready due to invalid extension.

ACTIVITY_TYPE VALUE	ACTIVITY
33	Agent forced not ready due to blocked extension
34	Send call to agent failed due to unknown reason.
35	SMS replied.
36	SMS deleted.
37	SMS error.
38	SMS replied requested.
39	IVR queue started
40	Out of Service group queue
41	SMS Originator Called back
42	SMS Forward requested
43	SMS Forwarded
44	SMS Initiate Requested
45	SMS Initiated
46	Outbound call initiated
47	Outbound call cleared
48	Call removed due to error
49	E-mail error during agent handling
50	E-mail reply succeeded
51	E-mail reply failed
52	E-mail deleted
53	E-mail diverted to another agent or service group
54	Outbound e-mail initiated
55	Outbound e-mail successfully sent
56	Outbound e-mail failed to send
57	E-mail moved
58	E-mail copied
59	E-mail forward succeeded
60	E-mail forward failed
61	E-mail orphaned due to configuration change
62	Session routed to preferred agent
63	Chat message sent
64	Chat message received
65	Duplicate callback request
66	Chat session diverted to another agent or service group
67	E-mail sent for review

ACTIVITY_TYPE VALUE	ACTIVITY
68	SMS sent for review
69	Dispatch session moved
70	Open media session diverted to another agent or service group
71	Voice call diverted to another service group by an agent
72	Campaign call sent to agent
73	Campaign call initiated by agent
74	Campaign call rejected by agent
75	Campaign call status entered by agent

OBJECT TYPE

OBJECT_TYPE VALUE	NAME
512	Service Group. Type_id contains the ID of the associated service group from the service_grp table.
1024	Service Access. Type_id contains the ID of the associated service access from the service_access table.
4096	Agent. Type_id contains the ID of the associated agent from the cc_user table.
131072	Call Qualification Code. Type_id contains the ID of the associated CQ code from the call_qual table.