

## **Dialer Detail Table**

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# **About the Dialer\_Detail Table**

The Dialer\_Detail table is a historical table that is present in the Unified CCE database in Releases 7.2(2) and later. Its purpose is to allow detailed dialer records to be written to the Logger databases and replicated to each HDS database.

This table can become very large. Running custom reporting queries against it while it is on the HDS can degrade performance. To optimize performance, extract the data from the HDS into your own custom database on a separate server (one that is not used for other CCE components). Use only DBDateTime (date and time of the record that was written to the HDSdatabase) to perform the extraction. The table on the custom database can be indexed according to the custom reporting needs.

#### **Advantages**

Data stored in this table helps in managing the system and generating custom reports.

For example, the table stores the following information:

- The Account Number for the contact and the Call Result, so that the last termination code can be obtained for each contact.
- An identifier for the Agent so that callbacks scheduled by each agent can be determined.
- Additional data for troubleshooting of Outbound Dialer attempts, such as the CallID that was used to place the call.

### **Data Flow**

- 1. After making an attempt to contact a customer, the Dialer sends the results to the Campaign Manager in a CloseCustomerRecord message.
  - Results for Personal Callback attempts are sent to the Campaign Manager using a ClosePersonalCallbackRecord message.
- 2. Campaign Manager then sends a Dialer Detail record to the Router.

At this point, the message flow is identical to all other historical data in the system.

- 3. The Router passes the historical data information to the Historical Logger process.
- **4.** The Historical Logger process commits the data to the Logger database.
- **5.** The Replication process on the Logger passes the historical data to the Replication process on the Historical Data Server (HDS).
- **6.** The Replication process on the HDS commits the data to the HDS database.

#### **Fault Tolerance**

When the Router is down or the Campaign Manager loses the connection to the Router, the Campaign Manager stores Dialer\_Detail records in a file on the server where Campaign Manager is running. All the Dialer\_Detail records in the cached file are sent to the Router when the connection is restored.

# Dialer\_Detail Table Database Fields and Descriptions

For a full description of the database fields for the Dialer\_Detail table, see the *Database Schema Handbook* for Cisco Unified Contact Center Enterprise.

#### **CallResult Codes and Values**

The CallResult field can be populated with the following values:

Table 1: CallResult Codes and Values

Value	Description
0	Dialer has not yet attempted to contact that customer record
2	Error condition while dialing
3	Number reported not in service by network
4	No ringback from network when dial attempted
5	Operator intercept returned from network when dial attempted
6	No dial tone when dialer port went off hook
7	Number reported as invalid by the network
8	Customer phone did not answer
9	Customer phone was busy
10	Customer answered and was connected to agent
11	Fax machine detected

Value	Description			
12	Answering machine detected			
13	Dialer stopped dialing customer due to lack of agents or network stopped dialing before it was complete			
14	Customer requested callback			
15	Answering machine requested callback			
16	Call was abandoned by the dialer due to lack of agents			
17	Failed to reserve agent for personal callback.			
18	Agent rejected a preview call or personal callback call.			
19	Agent rejected a preview call with the close option.			
20	Customer has been abandoned to an IVR			
21	Customer dropped call within configured abandoned time			
22	Mostly used with TDM switches - network answering machine, such as a network voicemail			
23	Number successfully contacted but wrong number			
24	Number successfully contacted but reached the wrong person			
25	The following circumstances are reported where a call record is returned from the dialer without being attempted:			
	The campaign is disabled.			
	<ul> <li>The outbound percentage for the campaign skill group is set to zero in an admin script.</li> </ul>			
	With personal callback in certain situations where the agent is logged out or not available before the configured CallbackTimeLimit is exceeded.			
26	The number was on the do not call list			
27	Call disconnected by the carrier or the network while ringing			
28	Dead air or low voice volume call			
29	SIP message received from dialer is not supported by voice gateway.			
30	SIP message received from dialer is not authorized by voice gateway.			
31	Invalid sip message sent by dialer to voice gateway.			
32	Call cancelled because the dialer lost connection with the Campaign Manager.			

Value	Description	1				
33	Agent timed-out accepting preview or personal callback call.					
	Note	This Call Result is supported from 12.0 ES33 onwards.				

### **CallStatusZone Values**

The CallStatusZone1 and CallStatusZone2 fields can be populated with the following values that show the current status of the customer record for the zone.



Note

For campaigns created using API, CallStatusZone2 is not applicable.

The values are:

#### Table 2: CallStatusZone Values

Value	Description
A	Active: Stored in CallStatusZoneX (1 or 2). A zone is set to active when it has been sent to a dialer for dialing.
В	A callback was requested. Stored in CallStatusZone1 and CallStatusZone2 field when a regular callback (non personal callback) has been scheduled. The Callback time itself is stored in both the CallbackDateTimeZone1 and CallbackDateTimeZone2 columns since the callback overrides the individual zones.
С	Closed: Record has been closed for that particular zone, so the record will not be retried again for that zone (zone1 or zone2).
D	Dialed. Record has been dialed for that particular zone.
F	F= Fax Machine. Stored in CallStatusZoneX (1 or 2)
L	L = Not Allocated. Invalid number used for a Personal Callback.
J	Agent rejected (closed out the record)
М	The maximum number of attempts has been reached. Stored in both CallStatusZone1 and CallStatusZone2. A record is set to "M" when it has dialed the maximum times as specified in the campaign and will not be retried again. Both zones are set to "M" to indicate no further calling in either zone.
P	Pending. Stored in CallStatusZoneX (1 or 2). This is the initial state of a record before any dialing has taken place. The record remains in the pending state for a particular zone until all of the numbers specified for that zone are dialed. A pending contact which has already dialed at least one dialer from its sequence will have at least one CallBackDateTimeXX column filled in with a retry time.

Value	Description
R	Retry. Stored in CallStatusZoneX (1 or 2) for the zone where the Retry is scheduled. The retry time itself is stored in the CallbackDateTimeZoneX (1 or 2) as well as in the individual number column CallbackDateTimeXX, where XX is the number to be retried (01 - 10). Call can be retried for a variety of reasons, including receiving a busy or no answer result.  This value will be updated once all phones of the record are dialed out.
S	A personal callback was requested. Stored in both CallStatusZone1 and CallStatusZone2. A record is set to "S" when it has been scheduled for a personal callback. Both zones are set to "S" to indicate that the record has been moved to the personal callback list.
U	Unknown: Stored in CallStatusZone1 and CallStatusZone2. A record is set to Unknown if its status was Active when the Campaign Manager started or the Dialer re-started. The record will stay in the Unknown state until it gets an update. If the Campaign Manager fails to get an update within sixty minutes, it will return the record to Pending.
X	For a personal callback, the agent is not available, and the reschedule mode is Abandon. (This value is used for CallStatusZone1 only.)

# DialingMode Values

The DialingMode field can be populated with the following values that show the campaign mode for the call. This field is NULL for Do Not Call entries.

Values are shown in the following table.

Table 3: DialingMode Values

Value	Description
1	Predictive only
2	Predictive blended
3	Preview only
4	Preview blended
5	Progressive only
6	Progressive blended
7	Direct preview only
8	Direct preview blended

### **CallResults Table**

The following CallResults table maps the call result to the campaign call report.

Table 4: CallResults Table

Call Result	Description	Reporting Column	Counted as Attempt?	Detected Live Voice?	Retry Action
2	Error condition while dialing	None	No	No	Regular outbound calls are not retried and are returned to the closed state.  Callback calls are retried as Dialer Abandoned.
3	Number reported not in service by network	None	Yes	No	None
4	No ringback from network when dial attempted	NoRingBack	Yes	No	No answer
5	Operator intercept returned from network when dial attempted	SITTone	Yes	No	None
6	No dial tone when dialer port went off hook	NoDialTone	Yes	No	No answer
7	Number reported as invalid by the network	SITTone	Yes	No	None
8	Customer phone did not answer	NoAnswer	Yes	No	No answer
9	Customer phone was busy	Busy	Yes	No	Busy
10	Customer answered and was connected to agent	Voice	Yes	Yes	None
11	Fax machine detected	Fax	Yes	No	None
12	Answering machine detected	AnsweringMachine	Yes	No, but transfer to agent possible	Answering Machine, if needed

Call Result	Description	Reporting Column	Counted as Attempt?	Detected Live Voice?	Retry Action
13	Dialer stopped dialing customer due to lack of agents or network stopped dialing before it was complete.	Cancelled	Yes	No	Dialer Abandoned
14	Customer requested callback	Callback & PersonalCallback	Yes	Yes	None
15	Answering machine requested callback	Callback & PersonalCallback	Yes	No	None
16	Call was abandoned by the dialer due to lack of agents	Abandon	Yes	Yes	Dialer Abandoned
17	Failed to reserve agent for personal callback	None	No	No	No answer.
18	Agent has rejected a preview call or personal callback call	AgentRejected	No	No	For Preview calls: No Answer. For Personal Callback calls: None.
19	Agent has rejected a preview call with the close option	AgentClosed	No	No	None
20	Customer has been abandoned to an IVR	AbandonToIVR	Yes	Yes	Dialer Abandoned, if needed
21	Customer dropped call within configured abandoned time	CustomerAbandon	Yes	Yes	Customer Abandoned
22	Mostly used with TDM switches - network answering machine, such as a network voicemail	NetworkAnsMachine	Yes	No	Answering Machine, if needed
23	Number successfully contacted but wrong number	WrongNumber	Yes	Yes	None
24	Number successfully contacted but reached the wrong person	CustomerNotHome	Yes	Yes	Customer not home

Call Result	Description	Reporting Column  None	Counted as Attempt?	Detected Live Voice?	Retry Action	
25	The following circumstances are reported where a call record is returned from the dialer without being attempted:		No	No	None, but returned to the pending state	
	<ul> <li>The campaign is disabled.</li> </ul>					
	• The outbound percentage for the campaign skill group is set to zero in an admin script.					
	With personal callback in certain situations where the agent is logged out or not available before the configured CallbackTimeLimit is exceeded.					
26	The number was on the do not call list	None	No	No	None	
27	Network disconnected while alerting	NoRingback	Yes	No	No answer	
28	Low Energy or Dead Air call detected by CPA	NoRingback	Yes	No	No answer	
29	SIP message received from dialer is not supported by voice gateway					
30	SIP message received from dialer is not authorized by voice gateway					
31	Invalid sip message sent by dialer to voice gateway					
32	Call cancelled because the dialer lost connection with the Campaign Manager	Cancelled	Yes	No	None	

Call Result	Descript	ion	Reporting Column	Counted as Attempt?	Detected Live Voice?	Retry Action
33		med-out accepting or personal callback  This Call Result is supported from 12.0 ES33 onwards.	None	No	No	No Answer

#### Outbound dialer call result for combinations of PSTN and status code

The following dialer call results corresponds to the combinations of PSTN cause code and Status code specified in the Dialer\_ Detail table.

Status code: Status code is a 3-digit integer result code that indicates the outcome of an attempt to understand and satisfy a SIP request.

PSTN cause code: In signaling context, PSTN cause codes are used to indicate certain events or conditions in the network.

CheckCallState: Indicates whether the call is active or not . TRUE value implies that the call is active.

CallState: Indicates the intermediate call state. When a call is active, it can have any one of the following values - CS\_INITIATED, CS\_ALERTED, and CS\_CONNECTED.

DialerCallResult: Indicates the SIP Dialer call result for the respective SIP status code and PSTN cause code.

Table 5: Outbound Dialer Call Result for PSTN and status code combinations

StatusCode	PSTNCauseCode	CheckCallState	CallState	DialerCallResult	System Type Values (from Dialer detail: CallResult)
400	41	FALSE	CS_NONE	INVALID_NETWORK_MSG	31
401	57	FALSE	CS_NONE	NOT_AUTHORIZED	30
403	57	FALSE	CS_NONE	NOT_IN_SERVICE	3
404	0	FALSE	CS_NONE	NUMBER_NOT_ALLOCATED	7
404	1	FALSE	CS_NONE	NUMBER_NOT_ALLOCATED	7
404	31	FALSE	CS_NONE	NUMBER_NOT_ALLOCATED	7
404	20	FALSE	CS_NONE	NOT_IN_SERVICE	3
405	63	FALSE	CS_NONE	NOT_IN_SERVICE	3
406	88	FALSE	CS_NONE	NOT_SUPPORTED	29

StatusCode	PSTNCauseCode	CheckCallState	CallState	DialerCallResult	System Type Values (from Dialer detail: CallResult)
407	57	FALSE	CS_NONE	NOT_AUTHORIZED	30
408	120	FALSE	CS_NONE	NO_DIALTONE	6
409	47	FALSE	CS_NONE	NOT_SUPPORTED	29
410	22	FALSE	CS_NONE	NUMBER_NOT_ALLOCATED	7
411	47	FALSE	CS_NONE	NOT_SUPPORTED	29
412	38	FALSE	CS_NONE	NOT_AUTHORIZED	30
413	127	FALSE	CS_NONE	NOT_SUPPORTED	29
415	47	FALSE	CS_NONE	NOT_SUPPORTED	29
417	47	FALSE	CS_NONE	NOT_SUPPORTED	29
420	95	FALSE	CS_NONE	INVALID_NETWORK_MSG	31
421	95	FALSE	CS_NONE	NOT_SUPPORTED	29
422	100	FALSE	CS_NONE	NOT_SUPPORTED	29
422	100	FALSE	CS_NONE	STOPPED	13
422	100	TRUE	CS_CONNECTED	STOPPED	13
423	47	FALSE	CS_NONE	NOT_SUPPORTED	29
424	41	FALSE	CS_NONE	INVALID_NETWORK_MSG	31
428	41	FALSE	CS_NONE	NOT_SUPPORTED	29
429	41	FALSE	CS_NONE	NOT_SUPPORTED	29
430	127	FALSE	CS_NONE	INVALID_NETWORK_MSG	31
433	57	FALSE	CS_NONE	NOT_SUPPORTED	29
436	41	FALSE	CS_NONE	NOT_SUPPORTED	29
437	41	FALSE	CS_NONE	NOT_SUPPORTED	29
438	41	FALSE	CS_NONE	INVALID_NETWORK_MSG	31
439	88	FALSE	CS_NONE	NOT_SUPPORTED	29
470	41	FALSE	CS_NONE	NOT_AUTHORIZED	30
480	18	TRUE	CS_INITIATED	NO_RINGBACK	4
480	18	TRUE	CS_ALERTED	NO_ANSWER	8
480	19	FALSE	CS_NONE	NO_ANSWER	8
480	20	TRUE	CS_INITIATED	NO_RINGBACK	4
480	20	TRUE	CS_ALERTED	NO_RINGBACK	4

StatusCode	PSTNCauseCode	CheckCallState	CallState	DialerCallResult	System Type Values (from Dialer detail: CallResult)
480	20	TRUE	CS_CONNECTED	CUSTOMER_ABANDONED	21
480	20	TRUE	CS_NONE	NO_RINGBACK	4
481	127	FALSE	CS_NONE	CUSTOMER_ABANDONED	21
482	25	FALSE	CS_NONE	STOPPED	13
482	25	TRUE	CS_INITIATED	STOPPED	13
482	25	TRUE	CS_ALERTED	STOPPED	13
482	25	TRUE	CS_CONNECTED	STOPPED	13
484	28	FALSE	CS_NONE	NUMBER_NOT_ALLOCATED	7
485	1	FALSE	CS_NONE	NUMBER_NOT_ALLOCATED	7
486	0	FALSE	CS_NONE	BUSY	9
486	17	FALSE	CS_NONE	BUSY	9
487	127	TRUE	CS_NONE	NO_DIALTONE	6
487	127	TRUE	CS_INITIATED	NO_RINGBACK	4
487	127	TRUE	CS_ALERTED	NO_ANSWER	8
488	47	FALSE	CS_NONE	NOT_SUPPORTED	29
489	41	FALSE	CS_NONE	NOT_SUPPORTED	29
491	31	FALSE	CS_NONE	ABANDON	16
491	31	TRUE	CS_CONNECTED	ABANDON	16
493	97	FALSE	CS_NONE	NOT_SUPPORTED	29
494	57	FALSE	CS_NONE	NOT_AUTHORIZED	30
500	4	FALSE	CS_NONE	NUMBER_NOT_ALLOCATED	7
500	5	FALSE	CS_NONE	NUMBER_NOT_ALLOCATED	7
500	6	FALSE	CS_NONE	NO_DIALTONE	6
500	44	FALSE	CS_NONE	NO_DIALTONE	6
500	8	TRUE	CS_INITIATED	NO_RINGBACK	4
500	9	TRUE	CS_INITIATED	NO_RINGBACK	4
500	39	TRUE	CS_INITIATED	NO_RINGBACK	4
500	16	TRUE	CS_INITIATED	NO_RINGBACK	4
500	16	TRUE	CS_ALERTED	NO_ANSWER	8
500	16	TRUE	CS_CONNECTED	CUSTOMER_ABANDONED	21

StatusCode	PSTNCauseCode	CheckCallState	CallState	DialerCallResult	System Type Values (from Dialer detail: CallResult)
500	44	FALSE	CS_NONE	NO_DIALTONE	6
500	46	FALSE	CS_NONE	BUSY	9
500	63	FALSE	CS_NONE	NUMBER_NOT_ALLOCATED	7
500	86	FALSE	CS_NONE	CUSTOMER_ABANDONED	21
501	79	FALSE	CS_NONE	NOT_SUPPORTED	29
502	38	FALSE	CS_NONE	NO_DIALTONE	6
502	0	FALSE	CS_NONE	NO_DIALTONE	6
503	0	FALSE	CS_NONE	NO_DIALTONE	6
503	34	FALSE	CS_NONE	NO_DIALTONE	6
503	41	FALSE	CS_NONE	NO_DIALTONE	6
503	42	FALSE	CS_NONE	NO_DIALTONE	6
503	47	FALSE	CS_NONE	NO_DIALTONE	6
503	87	FALSE	CS_NONE	NO_DIALTONE	6
504	102	FALSE	CS_NONE	NOT_SUPPORTED	29
505	127	FALSE	CS_NONE	NOT_SUPPORTED	29
513	100	FALSE	CS_NONE	NOT_SUPPORTED	29
580	47	FALSE	CS_NONE	NO_DIALTONE	6
604	1	FALSE	CS_NONE	NUMBER_NOT_ALLOCATED	7
600	17	FALSE	CS_NONE	BUSY	9