



## Cisco call detail records codes

This chapter provides information about the codec types and codes that are used in the Call Detail Record fields.

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### Codec types

The following table contains the compression and payload types that may appear in the codec fields.

**Table 1: Codec Types**

Value	Description
1	NonStandard
2	G711A law 64k
3	G711A law 56k
4	G711mu-law 64k
5	G711mu-law 56k
6	G722 64k
7	G722 56k
8	G722 48k
9	G7231

Value	Description
10	G728
11	G729
12	G729AnnexA
13	Is11172AudioCap
14	Is13818AudioCap
15	G.729AnnexB
16	G.729 Annex AwAnnexB
18	GSM Full Rate
19	GSM Half Rate
20	GSM Enhanced Full Rate
25	Wideband 256K
32	Data 64k
33	Data 56k
40	G7221 32K
41	G7221 24K
42	AAC-LD (mpeg4-generic)
43	AAC-LD (MP4A-LATM) 128K
44	AAC-LD (MP4A-LATM) 64K
45	AAC-LD (MP4A-LATM) 56K
46	AAC-LD (MP4A-LATM) 48K
47	AAC-LD (MP4A-LATM) 32K
48	AAC-LD (MP4A-LATM) 24K
80-	GSM
81	ActiveVoice

Value	Description
82	G726 32K
83	G726 24K
84	G726 16K
86	iLBC
89	iSAC
100	H261
101	H263
102	Vieo
103	H264
106	H224

### Related Topics

- [CDR Examples](#)
- [Cisco call detail records field descriptions](#)
- [Documentation related to CDR](#)

## Call termination cause codes

The following tables contain call termination cause codes that may appear in the Cause fields in CDRs.



### Note

Cause Code is defined in call control as Natural number. It is a 32 bit unsigned (long) positive integer with values ranging from 0 to +4,294,967,295.

**Table 2: Call Termination Cause Codes**

Code	Description
0	No error
1	Unallocated (unassigned) number
2	No route to specified transit network (national use)
3	No route to destination

<b>Code</b>	<b>Description</b>
4	Send special information tone
5	Misdialed trunk prefix (national use)
6	Channel unacceptable
7	Call awarded and being delivered in an established channel
8	Preemption
9	Preemption—circuit reserved for reuse
16	Normal call clearing
17	User busy
18	No user responding
19	No answer from user (user alerted)
20	Subscriber absent
21	Call rejected
22	Number changed
26	Non-selected user clearing
27	Destination out of order
28	Invalid number format (address incomplete)
29	Facility rejected
30	Response to STATUS ENQUIRY
31	Normal, unspecified
34	No circuit/channel available
38	Network out of order
39	Permanent frame mode connection out of service
40	Permanent frame mode connection operational
41	Temporary failure

<b>Code</b>	<b>Description</b>
42	Switching equipment congestion
43	Access information discarded
44	Requested circuit/channel not available
46	Precedence call blocked
47	Resource unavailable, unspecified
49	Quality of Service not available
50	Requested facility not subscribed
53	Service operation violated
54	Incoming calls barred
55	Incoming calls barred within Closed User Group (CUG)
57	Bearer capability not authorized
58	Bearer capability not presently available
62	Inconsistency in designated outgoing access information and subscriber class
63	Service or option not available, unspecified
65	Bearer capability not implemented
66	Channel type not implemented
69	Requested facility not implemented
70	Only restricted digital information bearer capability is available (national use)
79	Service or option not implemented, unspecified
81	Invalid call reference value
82	Identified channel does not exist
83	A suspended call exists, but this call identity does not
84	Call identity in use
85	No call suspended

<b>Code</b>	<b>Description</b>
86	Call having the requested call identity has been cleared
87	User not member of CUG (Closed User Group)
88	Incompatible destination
90	Destination number missing and DC not subscribed
91	Invalid transit network selection (national use)
95	Invalid message, unspecified
96	Mandatory information element is missing
97	Message type nonexistent or not implemented
98	Message is not compatible with the call state, or the message type is nonexistent or not implemented
99	An information element or parameter does not exist or is not implemented
100	Invalid information element contents
101	The message is not compatible with the call state
102	Call terminated when timer expired; a recovery routine executed to recover from the error
103	Parameter nonexistent or not implemented - passed on (national use)
110	Message with unrecognized parameter discarded
111	Protocol error, unspecified
122	Precedence Level Exceeded
123	Device not Preemptable
125	Out of bandwidth (Cisco specific)
126	Call split (Cisco specific)
127	Interworking, unspecified
129	Precedence out of bandwidth
131	Call Control Discovery PSTN Failover (Cisco specific)
132	IME QOS Fallback (Cisco specific)

Code	Description
133	PSTN Fallback locate Call Error (Cisco specific)
134	PSTN Fallback wait for DTMF Timeout (Cisco specific)
135	IME Failed Connection Timed out (Cisco specific)
136	IME Failed not enrolled (Cisco specific)
137	IME Failed socket error (Cisco specific)
138	IME Failed domain blacklisted (Cisco specific)
139	IME Failed prefix blacklisted (Cisco specific)
140	IME Failed expired ticket (Cisco specific)
141	IME Failed remote no matching route (Cisco specific)
142	IME Failed remote unregistered (Cisco specific)
143	IME Failed remote IME disabled (Cisco specific)
144	IME Failed remote invalid IME trunk URI (Cisco specific)
145	IME Failed remote URI not E164 (Cisco specific)
146	IME Failed remote called number not available (Cisco specific)
147	IME Failed Invalid Ticket (Cisco specific)
148	IME Failed unknown (Cisco specific)

**Table 3: Cisco-Specific Call Termination Cause Codes**

Decimal Value Code	Hex Value Code	Description
262144	0x40000	Conference Full (was 124)
393216	0x60000	Call split (was 126)This code applies when a call terminates during a transfer operation because it was split off and terminated (was not part of the final transferred call). This code can help you to determine which calls terminated as part of a feature operation.
458752	0x70000	Conference drop any party/Conference drop last party (was 128)
16777257	0x1000029	CCM_SIP_400_BAD_REQUEST

Decimal Value Code	Hex Value Code	Description
33554453	0x2000015	CCM_SIP_401_UNAUTHORIZED
50331669	0x3000015	CCM_SIP_402_PAYMENT_REQUIRED
67108885	0x4000015	CCM_SIP_403_FORBIDDEN
83886081	0x5000001	CCM_SIP_404_NOT_FOUND
100663359	0x600003F	CCM_SIP_405_METHOD_NOT_ALLOWED
117440591	0x700004F	CCM_SIP_406_NOT_ACCEPTABLE
134217749	0x8000015	CCM_SIP_407_PROXY_AUTHENTICATION_REQUIRED
150995046	0x9000066	CCM_SIP_408_REQUEST_TIMEOUT
184549398	0xB000016	CCM_SIP_410_GONE
201326719	0xC00007F	CCM_SIP_411_LENGTH_REQUIRED
234881151	0xE00007F	CCM_SIP_413_REQUEST_ENTITY_TOO_LONG
251658367	0xF00007F	CCM_SIP_414_REQUEST_URI_TOO_LONG
268435535	0x1000004F	CCM_SIP_415_UNSUPPORTED_MEDIA_TYPE
285212799	0x1100007F	CCM_SIP_416_UNSUPPORTED_URI_SCHEME
83886207	0x1500007F	CCM_SIP_420_BAD_EXTENSION
369098879	0x1600007F	CCM_SIP_421_EXTENSION_REQUIRED
402653311	0x1800007F	CCM_SIP_423_INTERVAL_TOO_BRIEF
419430421	0x19000015	CCM_SIP_424_BAD_LOCATION_INFO
1073741842	0x40000012	CCM_SIP_480_TEMPORARILY_UNAVAILABLE
1090519081	0x41000029	CCM_SIP_481_CALL_LEG_DOES_NOT_EXIST
1107296281	0x42000019	CCM_SIP_482_LOOP_DETECTED = 0x42000000 + EXCHANGE_ROUTING_ERROR
1124073497	0x43000019	CCM_SIP_483_TOO_MANY_HOOPS
1140850716	0x4400001C	CCM_SIP_484_ADDRESS_INCOMPLETE
1157627905	0x45000001	CCM_SIP_485_AMBIGUOUS



Decimal Value Code	Hex Value Code	Description
1174405137	0x46000011	CCM_SIP_486_BUSY_HERE
1191182367	0x4700001F	CCM_SIP_487_REQUEST_TERMINATED
1207959583	0x4800001F	CCM_SIP_488_NOT_ACCEPTABLE_HERE
1258291217	0x4B000011	CCM_SIP_491_REQUEST_PENDING
1291845649	0x4D000011	CCM_SIP_493_UNDECIPHERABLE
1409286185	0x54000029	CCM_SIP_500_SERVER_INTERNAL_ERROR
1442840614	0x56000026	CCM_SIP_502_BAD_GATEWAY
1459617833	0x57000029	CCM_SIP_503_SERVICE_UNAVAILABLE
2801795135	0xA700003F	CCM_SIP_503_SERVICE_UNAVAILABLE_SER_OPTION_NOAV
1476395110	0x58000066	CCM_SIP_504_SERVER_TIME_OUT
1493172351	0x5900007F	CCM_SIP_505_SIP_VERSION_NOT_SUPPORTED
1509949567	0x5A00007F	CCM_SIP_513_MESSAGE_TOO_LARGE
2701131793	0xA1000011	CCM_SIP_600_BUSY_EVERYWHERE
2717909013	0xA2000015	CCM_SIP_603_DECLINE
2734686209	0xA3000001	CCM_SIP_604_DOES_NOT_EXIST_ANYWHERE
2751463455	0xA400001F	CCM_SIP_606_NOT_ACCEPTABLE

## Redirect reason codes

The following table contains the available Redirect Reason Codes that may appear in a record.

<b>Q.931 Standard Redirect Reason Codes</b>	
Value	Description
0	Unknown
1	Call Forward Busy
2	Call Forward No Answer

<b>Q.931 Standard Redirect Reason Codes</b>	
<b>Value</b>	<b>Description</b>
4	Call Transfer
5	Call Pickup
7	Call Park
8	Call Park Pickup
9	CPE Out of Order
10	Call Forward
11	Call Park Reversion
15	Call Forward all
<b>Nonstandard Redirect Reason Codes</b>	
18	Call Deflection
34	Blind Transfer
50	Call Immediate Divert
66	Call Forward Alternate Party
82	Call Forward On Failure
98	Conference
114	Barge
129	Aar
130	Refer
146	Replaces
162	Redirection (3xx)
177	SIP-forward busy greeting
178	Call Forward Unregistered
207	Follow Me (SIP-forward all greeting)
209	Out of Service (SIP-forward busy greeting)

<b>Q.931 Standard Redirect Reason Codes</b>	
<b>Value</b>	<b>Description</b>
239	Time of Day (SIP-forward all greeting)
242	Do Not Disturb (SIP-forward no answer greeting)
257	Unavailable (SIP-forward busy greeting)
274	Away (SIP-forward no answer greeting)
303	Mobility HandIn
319	Mobility HandOut
335	Mobility Follow Me
354	Recording
370	Monitoring
399	Mobility IVR
415	Mobility Cell Pickup
418	Click to Conference
434	Forward No Retrieve
450	Forward No Retrieve Send Back to Parker
464	Call Control Discovery (indicates that the call is redirected to a PSTN failover number)
480	Intercompany Media Engine (IME)
496	IME Connection Timed Out
512	IME Not Enrolled
528	IME Socket Error
544	IME Domain Blacklisted
560	IME Prefix Blacklisted
576	IME Expired Ticket
592	IME Remote No Matching Route

<b>Q.931 Standard Redirect Reason Codes</b>	
<b>Value</b>	<b>Description</b>
608	IME Remote Unregistered
624	IME Remote IME Disabled
640	IME Remote Invalid IME Trunk URI
656	IME Remote URI not E164
672	IME Remote Called Number Not Available
688	IME Invalid Ticket
704	IME Unknown
720	IME PSTN Fallback
738	Presence Enabled Routing
752	Agent Greeting
786	Native Call Queuing, queue a call
802	Native Call Queuing, de-queue a call
818	Native Call Queuing, redirect to the second destination when no agent is logged in
834	Native Call Queuing, redirect to the second destination when the queue is full
850	Native Call Queuing, redirect to the second destination when the maximum wait time in queue is reached

## OnBehalfof codes

The following table contains the available OnBehalfof Codes that may appear in a CDR record.

**Table 4: OnBehalfof Codes**

<b>Value</b>	<b>Description</b>
0	Unknown
1	CctiLine

<b>Value</b>	<b>Description</b>
2	Unicast Shared Resource Provider
3	Call Park
4	Conference
5	Call Forward
6	Meet-Me Conference
7	Meet-Me Conference Intercepts
8	Message Waiting
9	Multicast Shared Resource Provider
10	Transfer
11	SSAPI Manager
12	Device
13	Call Control
14	Immediate Divert
15	Barge
16	Pickup
17	Refer
18	Replaces
19	Redirection
20	Callback
21	Path Replacement
22	FacCmc Manager
23	Malicious Call
24	Mobility
25	Aar

<b>Value</b>	<b>Description</b>
26	Directed Call Park
27	Recording
28	Monitoring
29	CCDRequestingService
30	Intercompany Media Engine
31	FallBack Manager
32	Presence Enabled Routing
33	AgentGreeting
34	NativeCallQueuing