

Standard Q.931 Disconnect Cause Codes

The following lists all the standard Q.931 (ISDN) cause codes as per the ITU specification. Many other vendors have implemented a larger number of cause codes, but they do not map to the specification and Quintum does not support them.

The cause codes list can be used to decode the disconnect reasons in ISDN messages (PBX or PSTN interfaces), Q.931 messages used to communicate over IP, Tenor CDR records and Tenor/Radius messages.

Decimal Value	Hexadecimal Value	Definition
1	01	Unallocated (unassigned) number. This number is not in the routing table or it has no path across the ISDN cloud (network). 1. Check routing table to see if the number is available. 2. Check to make sure the correct digits were dialed and it is a valid number.
2	02	No route to specified transit network (national use). The number was dialed with a transit network code such as 108880 to from AT&T to MCI and there is no route across.
3	03	No route to destination. The dialed number is in the routing plan, but there is no physical route to the destination. 1. The PRI D-Channel may be down at one end or the other. 2. The span or WAN is not connected correctly.
4	04	Send special information tone. Indicates that the called party cannot be reached for reasons that are of a long term nature and that the special information tone should be returned to the calling party.
5	05	Misdialed trunk prefix (national use). Indicates the erroneous inclusion of a trunk prefix in the called party number.
6	06	Channel Unacceptable. Indicates that the channel most recently identified is not acceptable to the sending entity for use in this call.
7	07	Call awarded and being delivered in an Established channel. Indicates that the user has been awarded the incoming call, and that the incoming call is being connected to a channel already established to that user for similar calls (e.g. packet-mode virtual calls).
8	08	Pre-Emption. Indicates that the call is being pre-empted.
0	09	Pre-Emption – Circuit reserved for reuse. Indicates that the call is being cleared because one of the users involved in the call has requested that the call be cleared.
16	10	Normal Call Clearing. This is one of the most common cause codes and is received for many reasons. It usually occurs because someone hung up the call at one side or the other.
17	11	User Busy. The number dialed is busy and cannot receive any more calls.
18	12	No User Responding. The called party does not respond to the call, or does not wish to answer the call.

19	13	<p>No Answer from User (User Alerted).</p> <p>The called party has been alerted to the incoming call, but does not respond with a connect indication within a prescribed period of time. NOTE: This cause is not necessarily generated by Q.931 procedures but may be generated by internal network timers.</p>
20	14	<p>Subscriber Absent.</p> <p>Used when a mobile station has logged off, radio contact is not obtained with a mobile station or if a personal telecommunications user is temporarily not addressable at any user-network interface.</p>
21	15	<p>Call Rejected.</p> <p>Indicates that the equipment sending this cause does not wish to accept this call, although it could have accepted the call because the equipment sending this cause is neither busy nor incompatible.</p> <p>May also be generated by the network, indicating that the call was cleared due to a supplementary service constraint.</p>
22	16	<p>Number Changed.</p> <p>This is returned to a calling party when the called party number indicated by the calling party is no longer assigned. The new called party number may optionally be included in the diagnostic field. If a network does not support this cause value, cause number 1 shall be used.</p>
26	1A	<p>Non-Selected User Clearing.</p> <p>Indicates that the user has not been awarded the incoming call.</p>
27	1B	<p>Destination Out-of-Order.</p> <p>This is a working number, but the span to the destination is not active or there is a problem sending messages to this destination.</p>
28	1C	<p>Invalid Number Format (address incomplete).</p> <p>Indicates that the called party cannot be reached because the called party number is not in a valid format or is not complete. This can happen when you are calling out using a network type number (enterprise) when you should be calling out Unknown or National for the Type of Number (TON).</p>
29	1D	<p>Facility Rejected.</p> <p>This cause is returned when a supplementary service requested by the user cannot be provided by the network.</p>
30	1E	<p>Response to STATUS ENQUIRY.</p> <p>This cause is included in the STATUS message when the reason for generating the STATUS message was the prior receipt of a STATUS ENQUIRY message.</p>
31	1F	<p>Normal, Unspecified.</p> <p>This is a very common cause code and happens when the network is not able to determine what to do with the call being made.</p>
34	22	<p>No Circuit/Channel Available.</p> <p>There are no B-Channels available to handle the selected call.</p>
38	26	<p>Network Out-of-Order.</p> <p>Indicates that the network is not functioning correctly and that the condition is likely to last a relatively long period of time.</p>
39	27	<p>Permanent Frame Mode Connection Out-of-Service.</p> <p>This cause is included in a STATUS message to indicate that a permanently established frame mode connection is out-of-service.</p>
40	28	<p>Permanent Frame Mode Connection Operational.</p> <p>This cause is included in a STATUS message to indicate that a permanently established frame mode connection is operational and capable of carrying user information.</p>
41	29	<p>Temporary Failure.</p> <p>The call was disconnected due to a network failure.</p> <p>The network is not functioning correctly and that the condition is not likely to last a long period of time; e.g. the user may wish to try another call attempt almost immediately.</p>

42	2A	Switching Equipment Congestion. Indicates that the switching equipment generating this cause is experiencing a period of high traffic.
43	2B	Access Information Discarded. Indicates that the network could not deliver access information to the remote user as requested, i.e. user-to-user information, low layer compatibility, high layer compatibility, or sub-address, as indicated in the diagnostic.
44	2C	Requested Circuit/Channel not Available. This cause is returned when the circuit or channel indicated by the requesting entity cannot be provided by the other side of the interface. This may happen when you get in a glare condition: Both sides are selected top-down or bottom-up channel hunting.
47	2F	Resource Unavailable, Unspecified. Used to report a resource unavailable event only when no other cause in the resource unavailable class applies.
49	31	Quality of Service Not Available. Used to report that the requested Quality of Service, as defined in Recommendation X.213, cannot be provided (e.g. throughput or transit delay cannot be supported).
50	32	Requested Facility Not Subscribed. This cause indicates that the user has requested a supplementary service which is implemented by the equipment which generated this cause, but the user is not authorized to use.
53	35	Outgoing Calls Barred Within Closed User Group (CUG). Indicates that although the calling party is a member of the CUG for the outgoing CUG call, outgoing calls are not allowed for this member of the CUG.
55	37	Incoming Calls Barred within CUG. Indicates that although the called party is a member of the CUG for the incoming CUG call, incoming calls are not allowed to this member of the CUG.
57	39	Bearer Capability Not Authorized. Indicates that the user has requested a bearer capability which is implemented by the equipment, which generated this cause but the user is not authorized to use.
58	3A	Bearer Capability Not Presently Available. Indicates that the user has requested a bearer capability, which is implemented by the equipment which generated this cause but which is not available at this time.
62	3E	Inconsistency in Designated Outgoing Access Information and Subscriber Class. This cause indicates that there is an inconsistency in the designated outgoing access information and subscriber class.
63	3F	Service or Option Not Available, Unspecified. Used to report a service or option not available event only when no other cause in the service or option not available class applies.
65	41	Bearer Capability Not Implemented. Indicates that the equipment sending this cause does not support the bearer capability requested (i.e. requesting 64kb data when only speech is supported).
66	42	Channel Type Not Implemented. Indicates that the equipment sending this cause does not support the channel type requested.
69	45	Requested Facility Not Implemented. Indicates that the equipment sending this cause does not support the requested supplementary service.
70	46	Only Restricted Digital Information Bearer Capability is Available (national use). Indicates that the calling party has requested an unrestricted (64kb) bearer service but that the equipment sending this cause only supports the restricted version of the requested bearer capability.

79	4F	<p>Service or Option Not Implemented, Unspecified.</p> <p>Used to report a service or option not implemented event only when no other cause in the service or option not implemented class applies.</p>
81	51	<p>Invalid Call Reference Value.</p> <p>Indicates that the equipment sending this cause has received a message with a call reference which is not currently in use or assigned on the user-network interface. E.G. The call that is being reference by this value, does not exist on this system.</p>
82	52	<p>Identified Channel Does Not Exist.</p> <p>Indicates that the equipment sending this cause has received a request to use a channel not activated on the interface for a call.</p> <p>For example, if a user has subscribed to those channels on a PRI numbered from 1 to 12 and the user equipment or the network attempts to use channels 13 through 23, this cause is generated.</p>
83	53	<p>A Suspended Call Exists, but This Call Identity Does Not.</p> <p>Indicates that a call resume has been attempted with a call identity which differs from that in use for any presently suspended call(s).</p>
84	54	<p>Call Identity in Use.</p> <p>Indicates that the network has received a call suspended request containing a call identity which is already in use for a suspended call within the domain of interfaces over which the call might be resumed.</p>
85	55	<p>No Call Suspended.</p> <p>Indicates that the network has received a call resume request containing a call identity information element, which presently does not indicate any suspended call within the domain of interfaces over which calls may be resumed.</p>
86	56	<p>Call Having the Requested Call Identity Has Been Cleared.</p> <p>Indicates that the network has received a call resume request containing a call identity information element indicating a suspended call that has in the meantime been cleared while suspended.</p>
87	57	<p>User Not Member of CUG.</p> <p>Indicates that the called user for the incoming CUG call is not a member of the specified CUG or that the calling user is an ordinary subscriber calling a CUG subscriber.</p>
88	58	<p>Incompatible Destination.</p> <p>The number being dialed is not capable of the type of call.</p> <ol style="list-style-type: none"> 1. Calling a restricted line in unrestricted mode. 2. Calling a pots phone using unrestricted mode. <p>Indicates that the equipment sending this cause has received a request to establish a call which has low layer compatibility, high layer compatibility, or other compatibility attributes which cannot be accommodated.</p>
90	5A	<p>Non-Existent CUG.</p> <p>Indicates that the specified CUG does not exist.</p>
91	5B	<p>Invalid Transit Network Selection (national use).</p> <p>Indicates that a transit network identification was received which is of an incorrect format as defined in Annex C/Q.931.</p>
95	5F	<p>Invalid Message, Unspecified.</p> <p>Used to report an invalid message event only when no other cause in the invalid message class applies.</p>
96	60	<p>Mandatory Information Element is Missing.</p> <p>Indicates that the equipment sending this cause has received a message which is missing an information element which must be present in the message.</p>
97	61	<p>Message Type Non-Existent or Not Implemented.</p> <p>Indicates that the equipment sending this cause has received a message with a message type it does not recognize either because this is a message not defined or defined but not implemented by the equipment sending this cause.</p>

98	62	<p>Message is Not Compatible with the Call State, or the Message Type is Non-Existent or Not Implemented.</p> <p>Indicates that the equipment sending this cause has received a message such that the procedures do not indicate that this is a permissible message to receive while in the call state, or a STATUS message was received indicating an incompatible call state.</p>
99	63	<p>An Information Element or Parameter Does Not Exist or is Not Implemented.</p> <p>Indicates that the equipment sending this cause has received a message which includes information element(s)/parameter(s) not recognized because the information element identifier(s)/parameter name(s) are not defined or are defined but not implemented by the equipment sending the cause.</p>
100	64	<p>Invalid Information Element Contents.</p> <p>The call has an information element that is not understood by the switch being called. This cause is usually followed by the information element that is causing the problem.</p>
101	65	<p>The Message is Not Compatible with the Call State.</p> <p>Indicates that a message has been received which is incompatible with the current call state for this call.</p>
102	66	<p>Recovery on Timer Expired.</p> <p>This occurs when ISDN messages don't arrive in specified time according to the Q.931 specification. This cause is sometimes followed by the timer that has expired.</p>
103	67	<p>Parameter Non-Existent or Not Implemented - Passed On (national use).</p> <p>Indicates that the equipment sending this cause has received a message which includes parameters not recognized because the parameters are not defined or are defined but not implemented by the equipment sending the cause.</p>
110	6E	<p>Message with Unrecognized Parameter Discarded.</p> <p>Indicates that the equipment sending this cause has discarded a received message, which includes a parameter that is not recognized.</p>
111	6F	<p>Protocol Error, Unspecified.</p> <p>Used to report a protocol error event only when no other cause in the protocol error class applies.</p>
127	7F	<p>Interworking, Unspecified.</p> <p>Indicates that there has been interworking with a network which does not provide causes for actions it takes. Thus, the precise cause for a message which is being sent cannot be ascertained.</p>