

Cisco 700 Series Routers ISDN BRI Cause Values

This appendix describes ISDN BRI standard cause values that might be received from the ISDN switch when using the Cisco 700 series routers. These values are sent from the ISDN switch to the router to indicate ISDN call status.

Although ISDN service providers generally define cause messages with decimal values, the Cisco 700 series routers display the hexadecimal (or *hex*) translation of the decimal value.

Note Although the cause values are standardized, each ISDN service provider uses its own version of the cause message wording. Therefore, the cause messages shown in Table G-1 might not be the exact messages as they appear on the terminal.

Table G-1 lists the ISDN BRI cause values, the hexadecimal translation, the cause message, and a short definition of the cause message.

Table G-1 ISDN BRI Cause Values and Cause Messages

Cause Value ¹	Hex Value ²	Cause Message	Definition
1	0001	Unassigned number	The ISDN number was sent to the switch in the correct format; however, the number is not assigned to any destination equipment.
2	0002	No route to specified transit network	The ISDN exchange is asked to route the call through an unrecognized intermediate network.

Cause Value¹	Hex Value²	Cause Message	Definition
3	0003	No route to destination	The call was routed through an intermediate network that does not serve the destination address.
6	0006	Channel unacceptable	The service quality of the specified channel is insufficient to accept the connection.
7	0007	Call awarded and delivered	The user is assigned an incoming call that is being connected to an already-established call channel.
16	0010	Normal call clearing	Normal call clearing has occurred.
17	0011	User busy	The called system acknowledges the connection request, but is unable to accept the call because all B channels are in use.
18	0012	No user responding	The connection cannot be completed because the destination does not respond to the call.
19	0013	No answer from user (user alerted)	The destination responds to the connection request, but fails to complete the connection within the prescribed time. The problem is at the remote end of the connection.
21	0015	Call rejected	The destination is capable of accepting the call, but rejected the call for an unknown reason.
22	0016	Number changed	The ISDN number used to set up the call is not assigned to any system. (If an alternate address is assigned to the called equipment, this might be returned in the diagnostic field of this message.)

Cause Value¹	Hex Value²	Cause Message	Definition
26	001A	Non-selected user clearing	The destination is capable of accepting the call, but rejected the call because it was not assigned to the user.
27	001B	Destination out of order	The destination cannot be reached because the interface is not functioning correctly, and a signaling message cannot be delivered. This might be a temporary condition, but could last for an extended period of time. For example, the remote equipment might be turned off.
28	001C	Invalid number format	The connection could be established because the destination address was presented in an unrecognizable format or because the destination address was incomplete.
29	001D	Facility rejected	The facility requested by the user cannot be provided by the network.
30	001E	Response to STATUS ENQUIRY	The status message was generated in direct response to the prior receipt of a status enquiry message.
31	001F	Normal, unspecified	Reports the occurrence of a normal event when no standard cause applies. No action required.
34	0022	No circuit/channel available	The connection cannot be established because no appropriate channel is available to take the call.

Cause Value¹	Hex Value²	Cause Message	Definition
38	0026	Network out of order	The destination cannot be reached because the network is not functioning correctly, and the condition might last for an extended period of time. An immediate reconnect attempt will probably be unsuccessful.
41	0029	Temporary failure	An error occurred because the network is not functioning correctly. The problem will be resolved shortly.
42	002A	Switching equipment congestion	The destination cannot be reached because the network switching equipment is temporarily overloaded.
43	002B	Access information discarded	The network cannot provide the requested access information.
44	002C	Requested circuit/channel not available	The remote equipment cannot provide the requested channel for an unknown reason. This might be a temporary problem.
47	002F	Resource unavailable, unspecified	The requested channel or service is unavailable for an unknown reason. This might be a temporary problem.
49	0031	Quality of service unavailable	The requested quality of service (as defined by CCITT ³ recommendation X.213) cannot be provided by the network. This might be a subscription problem.
50	0032	Requested facility not subscribed	The remote equipment supports the requested supplementary service, but only by subscription.
57	0039	Bearer capability not authorized	The user requested a bearer capability (BC) that the network provides, but that the user is not authorized to use. This might be a subscription problem.

Cause Value¹	Hex Value²	Cause Message	Definition
58	003A	Bearer capability not presently available	The network normally provides the requested BC, but not at the present time. This might be due to a temporary network problem or to a subscription problem.
63	003F	Service or option not available, unspecified	The network or remote equipment was unable to provide the requested service option for an unspecified reason. This might be a subscription problem.
65	0041	Bearer capability not implemented	The network cannot provide the bearer capability (BC) requested by the user.
66	0042	Channel type not implemented	The network or the destination equipment does not support the requested channel type.
69	0045	Requested facility not implemented	The remote equipment does not support the requested supplementary service.
70	0046	Only restricted digital information bearer is available	The network is unable to provide unrestricted digital information BC.
79	004F	Service or option not available, unspecified	The network or remote equipment is unable to provide the requested service option for an unspecified reason. This might be a subscription problem.
81	0051	Invalid call reference value	The remote equipment received a call with a call reference that is not currently in use on the user-network interface.
82	0052	Identified channel does not exist	The receiving equipment is requested to use a channel that is not activated on the interface for calls.

Cause Value¹	Hex Value²	Cause Message	Definition
83	0053	A suspended call exists but this call identity does not	The network received a call resume request. The call resume request contained a Call Identify information element that indicates that the call identity is being used for a suspended call.
84	0054	Call identity in use	The network received a call resume request. The call resume request contained a Call Identify information element that indicates that it is in use for a suspended call.
85	0055	No call suspended	The network received a call resume request when there was not a suspended call pending. This might be a transient error that will be resolved by successive call retries.
86	0056	Call having requested call identity has been cleared	The network received a call resume request. The call resume request contained a Call Identity information element, which once indicated a suspended call. However, the suspended call was cleared either by timeout or by the remote user.
88	0058	Incompatible destination	Indicates that an attempt was made to connect to non-ISDN equipment. For example, to an analog line.
91	005B	Invalid transit network specified	The ISDN exchange was asked to route the call through an unrecognized intermediate network.
95	005F	Invalid message, unspecified	An invalid message was received, and no standard cause applies. This is usually due to a D channel error. If this error occurs systematically, report it to your ISDN service provider.

Cause Value¹	Hex Value²	Cause Message	Definition
96	0060	Mandatory information element is missing	The receiving equipment received a message that did not include one of the mandatory information elements. This is usually due to a D-channel error. If this error occurs systematically, report it to your ISDN service provider.
97	0061	Message type non-existent or not implemented	The receiving equipment received an unrecognized message, either because the message type was invalid or because the message type was valid but not supported. Cause 97 is due to either a problem with the remote configuration or a problem with the local D channel.
98	0062	Message incompatible with call state or message type non-existent	The remote equipment received an invalid message, and no standard cause applies. Cause 98 is due to a D-channel error. If this error occurs systematically, report it to your ISDN service provider.
99	0063	Information element nonexistent or not implemented	The remote equipment received a message that includes information elements, which were not recognized. This is usually due to a D-channel error. If this error occurs systematically, report it to your ISDN service provider.
100	0064	Invalid information element contents	The remote equipment received a message that includes invalid information in the information element. This is usually due to a D-channel error.

Cause Value ¹	Hex Value ²	Cause Message	Definition
101	0065	Message not compatible with call state	The remote equipment received an unexpected message that does not correspond to the current state of the connection. This is usually due to a D-channel error.
102	0066	Recovery on timer expiry	An error-handling (recovery) procedure was initiated by a timer expiry. This is usually a temporary problem.
111	006F	Protocol error, unspecified	An unspecified D-channel error when no other standard cause applies.
127	007F	Interworking, unspecified	An event occurred, but the network does not provide causes for the action that it takes. The precise problem is unknown.
UNKNOWN	NA	Unknown or local error	An event occurred, but the network does not provide causes for the action that it take. The precise problem is unknown.

1. Cause value is shown in decimal format.

2. Hex value = hexadecimal translation of the decimal cause value.

3. CCITT = Comité Consultatif International Télégraphique et Téléphonique.