

Disconnect Cause codes

0x80 Normal Disconnect

The call disconnects normally.

0x81 Unallocated or unassigned number

The switch receives the ISDN number in the correct format. However, the number does not belong to destination equipment.

0x82 No route to specified network

The ISDN exchange receives a request to route the call through an unrecognized intermediate network.

This cause indicates that the equipment receives a request to route the call through a particular transit network. However, the equipment does not recognize the network.

The equipment that sends this cause does not recognize the transit network due to one of these reasons:

The transit network does not exist.

The transit network exists, but does not serve the equipment that sends this cause.

This cause is supported on a network-dependent basis.

0x83 No route to destination

The call routes through an intermediate network that does not serve the destination address.

This cause indicates that the called user is not reachable. A user is not reachable when the network used to route the call does not serve the required destination.

This cause is supported on a network-dependent basis.

0x84 Send special information tone

The remote number you dialed is not reachable.

Check the number you dial. Verify if you need any prefixes to access the network. For example, you need to dial 9 for outbound calls through a PBX. Contact your telco/PBX administrator for details.

0x85 Misdialed trunk prefix.

The remote number you dialed is not reachable.

Check the number you dial. Verify if you need any prefixes to access the network. For example, you need to dial 9 for outbound calls through a PBX. Contact your telco/PBX administrator for details.

0x86 Channel unacceptable

The service quality of the specified channel is insufficient to accept the connection. The call attempt fails because the channel is unusable.

If you use a PBX, check the configuration of the PBX. For a PRI, find out how many channels your telco provides.

0x87 Call awarded and delivered in established channel

The user assigns an incoming call that connects to an already established call channel.

This cause indicates that the user receives an incoming call, which connects to a channel already in use for similar calls (for example, packet-mode X.25 virtual calls).

0x88 Preemption

Your call is blocked. Calls are sometimes blocked if another call has a higher priority than your call. This situation is common with voice calls. Wait and call again later.

If you use a PBX (or the remote site to which you connect uses a PBX), check the configuration of the PBX. If the condition persists, contact your telco.

0x89 Preemption, circuit reserved for re-use

Your call is blocked. Calls are sometimes blocked if another call has a higher priority than your call. This situation is common with voice calls. Wait and call again later.

If either side uses a PBX, check the configuration of the PBX. If the condition persists, contact your telco.

0x90 Normal call clearing

Normal call clearing occurs. You do not need to perform any action.

This cause indicates that the call disconnects because one of the users involved in the call has made a request to clear the call. Under normal situations, the network is not the source of this cause.

If the call fails with this Disconnect Cause Code, the call most likely fails at a higher layer protocol such as PPP, authentication or idle timeout related issues. Verify the router configuration.

Also, if you have requested a callback, the remote device disconnects the call, generates this code, and then calls you back.

0x91 User busy

The called system acknowledges the connection request. However, the system cannot accept the call because all B-channels are in use. The user equipment is compatible with the call in this situation.

Note: If you have multiple ISDN circuits, the telco can configure them in a "hunt-group", in which calls switch to the next available circuit.

0x92 No user response

The connection fails because the destination does not respond to the call.

This cause indicates that a user does not respond to a call establishment message within the prescribed period. The user must respond with either an alert or connect indication according to ITU-T Q.931, when either timer T303 or T310 expires.

0x93 No answer from user

The destination responds to the connection request but fails to complete the connection within the prescribed time. This cause indicates that a user has provided an alert indication, but has not provided a connect indication within a prescribed period. Q.931 procedures do not necessarily generate this cause. Internal network timers sometimes generate this cause.

The problem is at the remote end of the connection.

0x94 Subscriber absent

The remote device you attempt to reach is unavailable and is disconnected from the ISDN network.

Contact the person responsible for that device.

0x95 Call rejected

The destination is able to accept the call but rejects the call for an unknown reason.

This cause indicates that the equipment that sends this cause does not want to accept this call.

Note: The equipment is able to accept the call because the equipment that sends this cause is neither busy nor incompatible. However, the equipment rejects the call.

0x96 Number changed

The ISDN number used to set up the call does not belong to a system.

A caller receives this cause when the called party number is no longer assigned. You can optionally include the new called party number in the diagnostic field. If a network does not support this capability, the caller receives cause No. 81, unassigned (unallocated) number.

0x97 Redirection to new destination

Your call is routed to a different ISDN number.

Check the number you call. Also verify the PBX configuration (if you use PBX).

0x99 Exchange routing error

Your call cannot be successfully routed to the remote party.

Check the number you call. Also verify the PBX configuration (if you use PBX).

0x9A Non-selected user clearing

The destination is able to accept the call. However, the destination rejects the call because the call is not assigned to a user.

0x9B Destination out of order

The destination is not reachable because of an interface malfunction. In addition, a signaling message cannot be delivered. This condition can be temporary. However, the condition can last for an extended period in some cases.

This cause indicates that a signaling message could not be delivered to the remote user. For example, a physical layer or data link layer fails at the remote user end, and the user equipment is off-line (turned off).

0x9C Invalid number format

The connection fails because the destination address is in an unrecognizable format, or is incomplete.

Verify whether the format of the number is correct. This includes any appropriate digits for a PBX, and long distance.

0x9D Facility rejected

The network cannot provide the facility that the user requests.

0x9E Response to STATUS ENQUIRY

The status message appears in direct response to the receipt of a status inquiry message.

0x9F Normal, unspecified

This message reports the occurrence of a normal event when no standard cause applies. No action is required.

0xA1 Circuit out of order

The call cannot go through due to some problem in the ISDN network.

0xA2 No channel available

The connection fails because no appropriate channel is available to take the call.

0xA3 Destination unattainable

The destination is not reachable through the Telco network. Contact the Telco.

0xA4 Out of order

Some part of the network necessary to route the call is out of order.

The destination is not reachable because of a network malfunction. The condition can last for an extended period. An immediate attempt to reconnect will probably fail.

If you use a long distance carrier, try to use a Presubscribed Inter-exchange Carrier (PIC). For example, you can use a 10-10-xyz carrier. A PIC enables you to verify whether the problem lies with the long distance carrier.

0xA6 Network out of order

The destination is not reachable because of a network malfunction. The condition can last for an extended period. An immediate attempt to reconnect will probably fail.

If you use a long distance carrier, try to use a Presubscribed Inter-exchange Carrier (PIC). For example, you can use a 10-10-xyz carrier. A PIC enables you to verify whether the problem lies with the long distance carrier.

0xA7 Permanent frame mode connection out of service

This message indicates that equipment failure probably terminates the permanent connection.

If the problem persists, contact your telco

0xA8 Permanent frame mode connection operational

This message occurs when the permanent connection is fully operational again after a termination. Equipment failure probably terminated the connection previously.

0xA9 Temporary failure

An error occurs because of a network malfunction. Contact the telco if the problem persists.

0xAA Switching equipment congestion

The destination is not reachable because of a temporary overload on the network switching equipment. Try again later.

0xAB Access information discarded

The network cannot provide the access information that the user requests.

This cause indicates that the network is unable to deliver access information to the remote user. For example, user-to-user information, low layer compatibility, high layer compatibility, or a sub-address as the diagnostic indicates.

Note: You have the option to include the particular type of discarded access information in the diagnostic.

0xAC Requested channel not available

The remote equipment cannot provide the channel that the user requests, due to an unknown reason. This problem is usually temporary.

0xAF Resources unavailable, unspecified

The channel or service that the user requests is unavailable for an unknown reason. This problem is usually temporary.

0xB1 Quality of service (QoS) unavailable

The network cannot provide the quality of service that the user requests. This issue can occur due to a subscription problem.

This cause reports that the network cannot provide the QoS as defined in Recommendation X.213. For example, this cause code appears when the network cannot support throughput or transit delay.

0xB2 Requested facility not subscribed

The remote equipment supports the supplementary service by subscription only.

This cause indicates that the network cannot provide the supplementary service that the user requests. The user has probably not completed the necessary administrative arrangements with the supporting networks.

The ISDN network can also return this cause code when a user makes a call attempt, but does not enter the SPIDs, or enters the SPIDs incorrectly. Ensure that your SPIDs are correct, or contact your telco to verify your SPIDs.

Also verify the speed of the outgoing call that the ISDN network supports (56k or 64k).

0xB4 Outgoing calls barred

There is some restriction on outgoing calls. The ISDN network does not allow you to make outgoing calls.

0xB5 Outgoing calls barred within CUG1

There is some restriction on outgoing calls. The ISDN network does not allow you to make outgoing calls.

0xB6 Incoming calls barred

The ISDN network does not allow you to receive calls.

Contact your telco.

0xB7 Incoming calls barred within CUG1

The ISDN network does not allow you to receive calls.

Contact your telco.

0xB9 Bearer capability not authorized

A subscription problem usually causes this issue.

This cause indicates that the user requests a bearer capability that the equipment implements, but the user does not have the authorization to use the capability.

0xBA Bearer capability not presently available

The network normally provides the bearer capability that the user requests. However, if the capability is unavailable currently, this cause appears. A temporary network problem or a subscription problem can cause this issue.

If the incoming call is Analog (modem call), verify whether you have an ISDN incoming voice-modem under the PRI or BRI physical interface.

0xBF Service/option not available, unspecified

The network or remote equipment cannot provide the service option that the user requests, due to an unspecified reason. A subscription problem can cause this issue.

0xC1 Bearer capability not implemented

The network cannot provide the bearer capability that the user requests.

Contact the telco to troubleshoot further.

0xC2 Channel type not implemented

The network or the destination equipment does not support the channel type that the user requests.

0xC5 Requested facility not implemented

The remote equipment does not support the supplementary service that the user requests.

0xC6 Only restricted digital info bearer capability available

The network cannot provide unrestricted digital information bearer capability.

This cause indicates that a device requests an unrestricted bearer service. However, the equipment only supports the restricted version of the bearer capability.

0xCF Service/option not implemented, unspecified

The network or remote equipment cannot provide the service option that the user requests, due to an unspecified reason. A subscription problem can cause this issue.

0xD1 Invalid call reference value

The remote equipment receives a call with a call reference that is not currently in use on the user-network interface.

0xD2 Identified channel does not exist

The user requests the receiving equipment to use a channel that is not activate on the interface for calls.

This cause indicates that the equipment receives a request to use an inactive channel on the interface for a call. For example, if a user subscribes to those channels on a primary rate interface numbered from 1 to 12 and the user equipment or the network attempts to assign a call to channels 13 through 23, this cause code appears.

0xD3 Suspended call exists, but call id does not

The network receives a call resume request. The call resume request contains a Call Identify (ID) information element that indicates the call ID that represents a suspended call.

This cause indicates that a user attempts to resume a call with a call ID which differs from the ID in use for any currently suspended call(s).

0xD4 Call id in use

The network receives a call resume request. The call resume request contains a Call ID information element that indicates the resume request is for a suspended call.

This cause indicates that the network receives a call suspend request. The call suspend request contains a call ID (including the null call ID). This ID is already in use for a suspended call within the domain of interfaces over which the call can be resumed.

0xD5 No call suspended

The network receives a call resume request when there is no suspended call pending. You can resolve this transient error through successive call retries.

This cause code indicates that the network receives a call resume request. The call resume request contains a call ID information element that currently does not indicate any suspended call within the domain interfaces over which calls can be resumed.

0xD6 Call with requested call id has been cleared

This cause indicates that the network receives a call resume request. The call resume request contains a call ID information element that originally indicated a suspended call. However, either a network timeout or a remote user clears the suspended call.

0xD7 User not member of CUG1

Your call does not go through, probably due to one of these reasons:

You dial an incorrect ISDN number.

You request a service that you are not authorized to use (you have not subscribed to this service).

The remote device is not authorized to use a service that you use.

Check the number you call. If the problem persists, contact your telco.

0xD8 Incompatible destination

This cause indicates an attempt to connect to non-ISDN equipment. For example, an analog line.

This cause indicates that the equipment receives a request to establish a call that has a low layer compatibility, high layer compatibility, or other compatibility attributes (for example, data rate) that the equipment cannot accommodate.

This code often appears when the calling device dials the wrong number, and reaches a non-ISDN device. Therefore, ensure that you dial the correct number.

This cause can also occur when a data call is made to a voice number, or a voice call is made to a number that only supports data. If the number is correct, check whether the telco has configured their switch incorrectly.

0xDA Non-existent CUG1

Your call does not go through, probably due to one of these reasons:

You dial an incorrect ISDN number.

You request a service that you are not authorized to use (you have not subscribed to this service).

The remote device is not authorized to use a service that you use.

Check the number you dial. If the problem persists, contact your telco.

0xDB Invalid transit network selection

The device requests the ISDN exchange to route the call through an unrecognized intermediate network.

This cause indicates that the ISDN exchange receives a transit network identification of an incorrect format. Annex C of ITU-T Q.931 provides this definition.

0xDF Invalid message, unspecified

An invalid message appears with no standard cause. This problem usually occurs due to a D-channel error. If the error occurs systematically, report the error to your ISDN service provider.

0xE0 Mandatory IE missing

The receiving equipment receives a message that does not include one of the mandatory information elements.

This cause indicates that the equipment receives a message that does not contain an information element that is necessary for the equipment to process the message.

This problem occurs due to a D-channel error. Ensure that you configure the switch type correctly.

0xE1 Message type not implemented

The receiving equipment receives an unrecognized message, because either the message type is invalid, or the equipment does not support the message type. A problem with the remote configuration or with the local D-channel causes this issue.

0xE2 Message not compatible with call state or not implemented

The remote equipment receives an invalid message with no standard cause.

This cause indicates that the equipment receives a message that is not permissible in the call state according to the procedures. This cause can also indicate that the equipment receives a STATUS message to indicate an incompatible call state.

The issue occurs due to a D-channel error. If the error recurs, report the error to your ISDN service provider.

0xE3 IE not implemented

The remote equipment receives a message that includes information elements that the equipment cannot recognize.

This cause indicates that the equipment receives a message that includes information elements that the device cannot recognize. This problem can occur when the equipment does not define or implement the information element identifier. However, the message does not need to contain the information element in order for the equipment to process the message.

This issue occurs due to a D-channel error. If the error recurs, report the error to your ISDN service provider.

0xE4 The remote equipment receives a message that includes invalid information in the information element.

This cause indicates that the equipment receives an information element that is implemented, but one or more of the fields in the information element are coded differently.

This issue occurs due to a D-channel error.

0xE5 Message not compatible with call state

The remote equipment receives an expected message that does not correspond to the current state of the connection.

This issue occurs due to a D-channel error.

0xE6 Recovery on time expiry

Your call does not go through, probably because an error occurs. For example, a state synchronization error.

Wait and try again later. If the problem persists, contact your ISDN service provider.

0xE7 Parameter not implemented

Your call does not go through because the ISDN network does not support a service you need to use.

Contact your ISDN service provider.

0xEF Protocol error, unspecified

This cause indicates an unspecified D-channel error with no other standard cause.

0xFF Interworking, unspecified

This cause indicates that an event occurs, but the network does not provide causes for the action. The precise problem is unknown.

0x??

Unknown Cause value

The cause value is unknown.