

# ISDN Commands

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This chapter describes the function and displays the syntax of each ISDN command. For more information about defaults and usage guidelines, see the corresponding chapter of the *Router Products Command Reference* publication.

**interface bri** *number*

**interface bri** *number.subinterface-number* [**multipoint** | **point-to-point**]

To configure a BRI interface and enter interface configuration mode, use the **interface bri** global configuration command.

To configure a BRI subinterface, use the **interface bri** [**multipoint** | **point-to-point**] global configuration command.

*number* Port, connector, or interface card number. The numbers are assigned at the factory at the time of installation or when added to a system, and can be displayed with the **show interfaces** command.

*.subinterface-number* Subinterface number in the range 1 to 4294967293. The number that precedes the period (.) must match the number this subinterface belongs to.

**multipoint** | **point-to-point** (Optional) Specifies a multipoint or point-to-point subinterface. The default is **multipoint**.

**[no] isdn answer1** [*called-party-number*][:*subaddress*]

**[no] isdn answer2** [*called-party-number*][:*subaddress*]

To have the router verify a called-party number or subaddress number in the incoming setup message for ISDN BRI calls, if the number is delivered by the switch, use the **isdn answer1** interface configuration command. To remove the verification request, use the **no** form of this command.

To have the router verify an additional called-party number or subaddress number in the incoming setup message for ISDN BRI calls, if the number is delivered by the switch, use the **isdn answer2** interface configuration command. To remove this second verification request, use the **no** form of this command.

*called-party-number* (Optional) Telephone number of the called party. At least one of the *called-party-number* or *subaddress* must be specified.

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Identifies the number that follows as a subaddress. Use the colon (:) when you configure both the called party number and the subaddress or when you configure only the subaddress.

*subaddress* (Optional) Subaddress number, 20 or fewer characters long, used for ISDN multipoint connections. At least one of the *called-party-number* or *subaddress* must be specified. Use the colon (:) when you configure the subaddress only.

**[no] isdn caller** *number*

To configure ISDN caller ID screening, use the **isdn caller** interface configuration command. To disable this feature, use the **no** form of this command.

*number* Telephone number for which to screen. Specify an x to represent a single “don’t-care” character. The maximum length of each number is 25 characters.

**isdn calling-number** *calling-number*

**no isdn calling number**

To configure an Australian basic-ts013 ISDN BRI interface to present a billing number of the device making the outgoing call, use the **isdn calling-number** interface configuration command. To remove a previously configured calling number, use the **no** form of this command.

*calling-number* Number of the device making the outgoing call; only one entry is allowed and it is limited to 16 digits.

**isdn not-end-to-end** *speed*

For incoming calls, to override the speed that the network reports it will use to deliver the call data, use the **isdn not-end-to-end** interface configuration command.

*speed* The line speed used for incoming calls that are not ISDN from end to end. Can be 56 or 64 kbps. The default line speed is 64 kbps.

**[no] isdn spid1** *spid-number* [*ldn*]

Use the **isdn spid1** interface configuration command to define at the router the service profile identifier (SPID) number that has been assigned by the ISDN service provider for the B1 channel. Use the **no isdn spid1** command to disable the specified SPID, thereby preventing access to the

switch. If you include the LDN in the **no** form of this command, the access to the switch is permitted, but the other B-channel may not be able to receive incoming calls.

- spid-number*      Number identifying the service to which you have subscribed. This value is assigned by the ISDN service provider and is usually a ten-digit telephone number with some extra digits.
- ldn*                      (Optional) Local directory number, as delivered by the service provider in the incoming Setup message. This is a seven-digit number assigned by the service provider.

**isdn spid2** *spid-number* [*ldn*]  
**no isdn spid2** *spid-number* [*ldn*]

Use the **isdn spid2** interface configuration command to define at the router the SPID number that has been assigned by the ISDN service provider for the B2 channel. Use the **no isdn spid2** command to disable the specified SPID, thereby preventing access to the switch. If you include the LDN in the **no** form of this command, the access to the switch is permitted, but the other B-channel might not be able to receive incoming calls.

- spid-number*      Number identifying the service to which you have subscribed. This value is assigned by the ISDN service provider and is usually a ten-digit telephone number with some extra digits.
- ldn*                      (Optional) Local directory number. This is a seven-digit number also assigned by the service provider.

## **isdn switch-type** *switch-type*

To configure a central office switch on the ISDN interface, use the **isdn switch-type** global configuration command.

*switch-type*      Service provider switch type; see the “ISDN Service Provider Switch Types” table in the *Router Products Command Reference* publication for a list of supported switches. The default is **none**.

## **isdn tei** [**first-call** | **powerup**]

### **no isdn tei**

To configure when ISDN Layer 2 terminal endpoint identifier (TEI) negotiation should occur, use the **isdn tei** global configuration command. Use the **no** form of this command to restore the default.

**first-call**      (Optional) ISDN TEI negotiation should occur when the first ISDN call is placed or received.

**powerup**        (Optional) ISDN TEI negotiation should occur when the router is powered on.

## **linecode b8zs**

Use the **linecode b8zs** controller configuration command to select the B8ZS line-code type for the T1 line attached to an ISDN PRI.

## **pri-group** [**timeslots** *range*]

### **no pri-group**

To specify ISDN Primary Rate Interface (PRI) on a channelized T1 card on the Cisco 7000 series, use the **pri-group** controller configuration command. Use the **no pri-group** command to remove the ISDN PRI.

**timeslots** *range*      (Optional) Specifies a single range of values from 1 to 23.

## **show controllers bri** *number*

To display information about the ISDN Basic Rate Interface (BRI), use the **show controllers bri** privileged EXEC command.

*number*            Interface number. The value is 0 through 7 if the router has one BRI NIM or 0 through 15 if the router has two BRI NIMs.

## **show interfaces bri** *number* [*first*] [*last*] [**accounting**]

Use the **show interfaces bri** privileged EXEC command to display information about the BRI D- and B-channels.

*number*            Interface number. The value is 0 through 7 if the router has one BRI NIM or 0 through 15 if the router has two BRI NIMs. Specifying just the *number* will display the D-channel for that BRI interface.

*first*              (Optional) Specifies the first of the B-channels; can be either 1 or 2. D-channel information is obtained by using the command without the optional arguments.

*last*                (Optional) Specifies the last of the B-channels; can only be 2, indicating B-channels 1 and 2. D-channel information is obtained by using the command without the optional arguments.

**accounting**        (Optional) Displays the number of packets of each protocol type that have been sent through the interface.

## **show isdn {memory | timers | services}**

To display the information about memory, Layer 2 and Layer 3 timers and, on the Cisco 7000 series only, to display information about the status of PRI channels, use the **show isdn EXEC** command.

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|-----------------|---|
| <b>memory</b>   | Displays memory pool statistics.                              |
| <b>timers</b>   | Displays the values of Layer 2 and Layer 3 timers.            |
| <b>services</b> | Displays the status of PRI channels. (Cisco 7000 series only) |