

## Configuring ISDN Physical Interface Properties

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You specify the physical ISDN interface in the form **br-pim/0/port**. *pim* is the slot in which the PIM is installed. The second number is always 0. *port* is the configured port number.

You specify the B-channel in the form **bc-pim/0/port:n**. *n* is the B-channel ID and can be 1 or 2. You specify the D-channel in the form **dc-pim/0/port:0**.



**NOTE:** The B- and D-channel interfaces do not have any configurable parameters. However, when interface statistics are displayed, B- and D-channel interfaces have statistical values.

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To enable ISDN interfaces installed on your Services Router to work properly, you must configure the interface properties. To configure physical interface properties, include the **isdn-options** statement at the [edit interfaces **br-pim/0/port**] hierarchy level:

```
[edit interfaces br-pim/0/port]
isdn-options {
  calling-number number;
  incoming-called-number number <reject>;
  spid1 spid-string;
  spid2 spid-string;
  static-tei-val value;
  switch-type (att5e | etsi | ni1 | ntdms100 | ntt);
  t310 seconds;
  tei-option (first-call | power-up);
}
dialer-options {
  pool pool-name <priority priority>;
}
```

You can configure the following ISDN options:

- **calling-number**—The calling number included in outgoing calls.
- **incoming-called-number**—Screening of incoming calls. If the incoming number of the incoming call is configured, the call is accepted. If the reject option is specified with the number, the call is rejected. If no numbers are configured, all calls are accepted. See “Configuring an ISDN Interface to Screen Incoming Calls” on page 2.
- **pool**—The dial pool for logical and physical ISDN interfaces. The dial pool allows logical (dialer) and physical (**br-pim/0/port**) interfaces to be bound together dynamically on a per-call basis. On a dialer interface, pool directs the dialer interface to a dial pool. On a **br-pim/0/port** interface, pool defines the pool to which the interface belongs. Specify a priority value from 0 (lowest) to 255 (highest) for the interface.

- `spid1`—The Service Profile Identifier (SPID). *spid-string* is a numeric value. If your service provider requires SPIDs, you cannot place calls until the interface sends a valid, assigned SPID to the service provider when accessing the ISDN connection. A single SPID must be configured as `spid1`.
- `spid2`—A second SPID, used for DMS-100 and NI1 switch types.
- `static-tei-val`—A static Terminal Endpoint Identifier (TEI) value. The TEI value represents any ISDN-capable device attached to an ISDN network that is the terminal endpoint. TEIs are used to distinguish between different devices using the same ISDN links. Specify a value from 0 through 63. You cannot configure a TEI value with multiple SPIDs—dynamic TEI assignment is required.



**NOTE:** TEI assignment is usually done dynamically instead of statically using the TEI management protocol. When the TEI management protocol is used, values 64-126 are assigned to terminal endpoints. TEI value 127 is used for group assignment.

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- `switch-type`—The ISDN switch type. The following switches are compatible:
  - `att5e`—AT&T 5ESS
  - `etsi`—NET3 for United Kingdom and Europe
  - `ni1`—National ISDN-1
  - `ntdms100`—Northern Telecom DMS-100
  - `ntt`—NTT Group switch for Japan
- `tei-option`—When the Terminal Endpoint Identifier (TEI) negotiates with the ISDN provider. Specify first-call (activation does not occur until the call setup is sent) or power-up (activation occurs when the Services Router is powered on). The default value is power-up.
- `t310`—Q.931-specific timer for T310, in seconds. Specify the number of seconds from 1 through 65536. The default value is 10 seconds.

## Configuring an ISDN Interface to Screen Incoming Calls

By default, an ISDN interface is configured to accept all incoming calls. If multiple devices are connected to the same ISDN line, you can configure an ISDN interface to screen incoming calls based on the incoming called number.

You can specify the incoming called numbers that an ISDN interface accepts. You can use the `reject` option to specify a number that the ISDN interface can ignore. The `reject` option is useful when an incoming called number is specified on one device connected to an ISDN line, and you want the incoming called number rejected on a second ISDN device connected to the same ISDN line. For example, if the first ISDN device has the called number 4085321901, you can configure the called number 4085321901 with the `reject` option on the second ISDN device.

When an incoming ISDN call is received, the Services Router matches the incoming called number against the called numbers configured on its ISDN interfaces. If an

exact match is not found, or if the called number is configured with the **reject** option, the incoming call is ignored. Each ISDN interface accepts only the calls whose called number are configured on it.

To specify that an incoming called number be rejected by the interface, include the **incoming-called-number** statement with the **reject** option at the **[edit interfaces br-pim/0/port isdn-options]** hierarchy level:

```
[edit interfaces br-pim/0/port]
isdn-options {
  incoming-called-number number reject;
}
```

You can configure up to 30 incoming called numbers.

