

show arap

To display information about a running AppleTalk Remote Access (ARAP) connection, use the **show arap** command in EXEC mode.

```
show arap [line-number]
```

| Syntax Description | <i>line-number</i> | (Optional) Number of the line on which an ARAP connection is established and active. |
|--------------------|--------------------|--|
|--------------------|--------------------|--|

| Command Modes | EXEC |
|---------------|------|
|---------------|------|

| Command History | Release | Modification |
|-----------------|---------|------------------------------|
| | 10.0 | This command was introduced. |

Usage Guidelines Use the **show arap** command with no arguments to display a summary of the ARAP traffic since the router was last booted.

Examples The following is an output example from the **show arap** command:

```
router# show arap

Statistics are cumulative since last reboot
Total ARAP connections: 2
Total Appletalk packets output: 157824
Total Appletalk packets input: 12465
```

These fields refer to the sum of all of the ARA connections since the box was last reloaded.

The following example results in a display of information about ARA activity on a specific line (line 3):

```
router# show arap 3

Active for 23 minutes
"Unlimited time left" or "22 minutes left"
"Doing smartbuffering" or "Smartbuffering disabled"
Appletalk packets output: 157824
Appletalk packets input: 12465
Appletalk packets overflowed: 1642
Appletalk packets dropped: 586
V42bis compression efficiency (incoming/outgoing): {percentage/percentage}
MNP4 packets received: 864
MNP4 packets sent: 1068
MNP4 garbled packets received: 4
MNP4 out of order packets received: 0
MNP4 packets resent: 0
MNP4 nobuffers: 0
```

Table 29 describes the fields shown in the display.

Table 29 show arap Field Descriptions

| Field | Description |
|--|--|
| Active for <i>integer</i> minutes | Number of minutes since ARAP started on the line. |
| Unlimited time left or <i>integer</i> minutes left | Remaining time limit on the line, if applicable on the line. |
| Doing smartbuffering or Smartbuffering disabled | Obsolete. Always says "Doing smartbuffering." |
| Appletalk packets output: | Number of AppleTalk packets that have been received from the Macintosh and out to the network during this connection. |
| Appletalk packets input: | Number of AppleTalk packets that have been received from the network and sent to the Macintosh during this connection. |
| Appletalk packets overflowed: | Number of packets from the network that have been dropped because the link to the Macintosh was congested. |
| Appletalk packets dropped: | Number of packets from the network that have been dropped because it was unnecessary to pass them (frequently RTMP). |
| V42bis compression efficiency (incoming/outgoing): | Performance of the v42bis protocol underneath ARA, expressed as percentage of incoming/percentage outgoing. If the efficiency is low, a network user is probably copying already compressed files across the link. Generally, low efficiency means slow performance. |
| MNP4 packets received: | Number of link-level packets that have been received from the Macintosh. |
| MNP4 packets sent: | How many link-level packets have been sent to the Macintosh. |
| MNP4 garbled packets received: | Number of garbled packets that have been received from the Macintosh. |
| MNP4 out of order packets received: | Number of out-of-order packets that have been received from the Macintosh. |
| MNP4 packets resent: | Number of times packets have been resent. ¹ |
| MNP4 nobuffers: | How many times MNP4 has run out of buffers. This field should be zero. |

1. Each of these fields indicates line noise. The higher the value, the higher the noise.

show async status

To display the status of activity on all lines configured for asynchronous support, use the **show async status** command in privileged EXEC mode.

show async status

Syntax Description This command has no arguments or keywords.

Command Modes Privileged EXEC

| Command History | Release | Modification |
|-----------------|---------|------------------------------|
| | 10.0 | This command was introduced. |

Usage Guidelines The display resulting from this command shows all asynchronous sessions, whether they are using Serial Line Internet Protocol (SLIP) or PPP encapsulation.

Examples The following is an output example from the **show async status** command:

```
router# show async status

Async protocol statistics:
  Rcvd: 5448 packets, 7682760 bytes
        1 format errors, 0 checksum errors, 0 overrun, 0 no buffer
  Sent: 5455 packets, 7682676 bytes, 0 dropped

Tty          Local          Remote Qd InPack OutPac Inerr  Drops  MTU  Qsz
  1          192.168.7.84      Dynamic 0     0     0     0     0 1500 10
* 3          192.168.7.98      None    0   5448  5455     1     0 1500 10
```

Table 30 describes significant fields shown in the display.

Table 30 show async status Field Descriptions

| Field | Description |
|-------------------|---|
| Rcvd | Statistics on packets received. |
| 5448 packets | Packets received. |
| 7682760 bytes | Total number of bytes. |
| 1 format errors | Spurious characters received when a packet start delimiter is expected. |
| 0 checksum errors | Count of checksum errors. |
| 0 overrun | Number of giants received. |
| 0 no buffer | Number of packets received when no buffer was available. |
| Sent | Statistics on packets sent. |

Table 30 *show async status Field Descriptions (continued)*

| Field | Description |
|---------------|--|
| 5455 packets | Packets sent. |
| 7682676 bytes | Total number of bytes. |
| 0 dropped | Number of packets dropped. |
| Tty | Line number. |
| * | Line currently in use. |
| Local | Local IP address on the link. |
| Remote | Remote IP address on the link; "Dynamic" indicates that a remote address is allowed but has not been specified; "None" indicates that no remote address is assigned or being used. |
| Qd | Number of packets on hold queue (Qsz is the maximum). |
| InPack | Number of packets received. |
| OutPac | Number of packets sent. |
| Inerr | Number of total input errors; sum of format errors, checksum errors, overruns and no buffers. |
| Drops | Number of packets received that would not fit on the hold queue. |
| MTU | Current maximum transmission unit size. |
| Qsz | Current output hold queue size. |

show call progress tone

To display the contents of the internal call progress (CP) tone database for a specific country, use the **show call progress tone** command in EXEC mode.

```
show call progress tone country [tone-type]
```

| Syntax Description | |
|--------------------|---|
| <i>country</i> | Enter the country code for the country's call progress tone database you want to see. |
| <i>tone-type</i> | (Optional) Enter the tone type parameters you want to see from Table 31. |

Defaults The default provided by the modem.

Command Modes EXEC

| Command History | Release | Modification |
|-----------------|-----------|------------------------------|
| | 12.0(4)XI | This command was introduced. |

Usage Guidelines Table 31 lists the supported tone type parameters.

Table 31 Supported Tone Type Parameters

| |
|--|
| busy —Busy tone |
| congestion —Congestion tone |
| dialtone —Dial tone |
| disconnect —Disconnect tone |
| error —Error tone |
| off-hook-alert —Off-hook alert tone |
| off-hook-notice —Off-hook notice tone |
| pbx-dialtone —PBX dialtone |
| ringback —Ringback tone |
| routing —Routing tone |

Using this command enables you to see the exact settings as they are programmed in the call-progress-tone database.

Examples

When you enter the **show call progress tone** command, the contents of the internal call progress tone database for a specific country appears as in the following example:

```
Router> show call progress tone japan
Call progress tone: Japan

Dial tone:
0      Forever      425Hz -15.0/-15.0/-15.0 dBm0

PBX Dial tone:
0      Forever      425Hz -15.0/-15.0/-15.0 dBm0

Busy tone:
0      250ms        425Hz -20.0/-20.0/-20.0 dBm0
1      250ms        Silence

Congestion tone:
0      250ms        425Hz -20.0/-20.0/-20.0 dBm0
1      250ms        Silence

Error tone:
0      330ms        950Hz -15.0/-15.0/-15.0 dBm0
1      330ms        1400Hz -15.0/-15.0/-15.0 dBm0
2      330ms        1800Hz -15.0/-15.0/-15.0 dBm0
3      500ms        Silence

Routing tone:
0      125ms        600Hz -24.0/-24.0/-24.0 dBm0
1      125ms        Silence
2      125ms        600Hz -24.0/-24.0/-24.0 dBm0
3      Forever      Silence

Disconnect tone:
0      330ms        600Hz -15.0/-15.0/-15.0 dBm0
1      330ms        Silence
2      330ms        600Hz -15.0/-15.0/-15.0 dBm0
3      Forever      Silence

Ringback tone:
0      1000ms       425Hz -19.0/-19.0/-19.0 dBm0
1      4000ms       Silence

Off-hook Notice tone:
0      100ms 1400x2040Hz -24.0/-24.0/-24.0 dBm0 -24.0/-24.0/-24.0 dBm0
1      100ms        Silence

Off-hook Alert tone:
0      100ms 1400x2040Hz -15.0/-15.0/-15.0 dBm0 -15.0/-15.0/-15.0 dBm0
1      100ms        Silence
```

Table 32 shows the significant display fields.

Table 32 show show call progress tone Field Description

| Field | Description |
|---|---|
| Cadence number | Call progress tones consist of cadences—periods of sound or silence with certain parameters that do not change during the cadence. The cadence number shows the number of a particular cadence within the call progress tone definition. Cadence numbers start at the number 0. |
| Cadence duration | Cadence duration in “Forever” means that the sound or silence can be heard forever, like in a dialtone. |
| Cadence type | Silence—no tone is generated 440Hz—a single frequency is generated. 440x530Hz—two frequencies are added (mixed). |
| Amplitudes for corresponding frequency components | Amplitudes for the corresponding frequency components. Different amplitudes are used on different trunk types. |

The following example shows a specific call progress tone (Japan, busy):

```
Router# show call progress tone japan busy
Busy tone for Japan:
0      2000ms  440x480 Hz -17.0/-17.0/-19.0 dBm0 -17.0/-17.0/-19.0 dBm0
1      4000ms      Silence
```

Related Commands

| Command | Description |
|---------------------------|---|
| call progress tone | Specifies the country code for retrieving the call progress tone parameters from the call progress tone database. |

show caller

To display caller information, enter the **show caller** EXEC command.

```
show caller [full | interface {dialer | serial} | ip | line {number | aux | console | tty | v110 | vty | x/y}
            | summary | timeouts | user name]
```

| | |
|------------------|--|
| full | This option provides expanded information. |
| interface | Displays a summary of caller information for the interface name you provide: <i>dialer</i> —Dialer interface <i>number</i> <i>serial</i> —Serial interface <i>number</i> |
| ip | Displays a summary of caller information for the IP address you provide. |
| line | Displays a summary of caller information for the line information you define: <i>number</i> —Line number <i>aux</i> —Auxiliary line <i>console</i> —Primary terminal line <i>tty</i> —Terminal controller <i>v110</i> —Caller information for v110 <i>vty</i> —Virtual terminal <i>x/y</i> —Slot/Port for internal modems |
| summary | Displays total users logged and total ISDN/Analog users since the last reload . |
| timeouts | Displays session and idle limits and disconnect time. |
| user name | Displays a summary of caller information for the username you provide. |

Defaults

None

Command Modes

EXEC

Command History

| Release | Modification |
|-----------|---------------------------------------|
| 11.3(5)AA | This command was introduced. |
| 12.1(3)T | The summary feature was added. |

Usage Guidelines

The **show caller** command is used to:

- View individual users and consumed resources on the NAS.

- Inspect active call statistics for large pools of connections. (Debug commands produce too much output and tax the CPU too heavily.)
- Display the absolute and idle times for each user. The current values for both of these settings are displayed on the TTY line and the asynchronous interface. Users that have been idle for unacceptably long periods of time can be easily identified. By using this information, you can define timeout policies and multiple grades of services for different users.

You can configure output modifiers for each option type of the **show caller** command.

Examples

The following example shows sample **show caller** output:

```
Router# show caller
Line      User           Service      Active
con 0    -              TTY          00:08:21
BR0:1    hatteras      PPP          00:00:14
Vi1      hatteras      PPP Bundle  00:00:13
```

The following example shows sample **show caller summary** output:

```
Router# show caller summary
 933 Analog calls
  0 ISDN calls
 933 Total users logged in
1305767 Total users since last reload
```

show controllers bri

To display information about the ISDN BRI, use the **show controllers bri** command in privileged EXEC mode.

show controllers bri *number*

Cisco MC3810 routers

show controllers bri [*number*]

Cisco 7200 series routers

show controllers bri *slot/port*

| Syntax Description | | |
|--------------------|------------------|--|
| | <i>number</i> | Interface number. The value is 0 through 7 if the router has one 8-port BRI network interface module (NIM), or 0 through 15 if the router has two 8-port BRI NIMs. Interface number values will vary, depending on the hardware platform used. The Cisco 3600 series router for example, can have up to 48 interfaces. Valid BRI controller numbers for the Cisco MC3810 router are from 1 to 4. |
| | <i>slot/port</i> | Backplane slot number and port number on the interface. See your hardware installation manual for the specific slot and port numbers. |

| Command Modes | |
|---------------|-----------------|
| | Privileged EXEC |

| Command History | Release | Modification |
|-----------------|-----------|--|
| | 10.3 | This command was introduced. |
| | 11.2P | This command was modified to include slot/port syntax for the PA-8B-ST and PA-4B-U port adapters on Cisco 7200 series routers. |
| | 12.0(3)XG | This command was modified to support the Cisco MC3810 router. |

Usage Guidelines If you use the **show controllers bri** command in the Cisco MC3810 without the slot-number keywords, information for all of the configured ISDN BRI controllers will be shown.

The BRI controller numbers match the physical ports numbers on the BRI voice module (BVM).

Examples

The following example shows controller statistics for interface BRI 1 on a Cisco MC3810 router:

```

Router#
Router# show controllers bri 1
BRI unit 1:
Layer 1 is DEACTIVATED. (ISDN L1 State F3)

S2084 registers:
Configuration register=0x1

QMC GLOBAL MULTICHANNEL PARAMETERS (at 0x30003C00)
[MCBASE]=0x1C4AE38, [QMCSTATE]=0x0, [MRBLR]=0x5F4
[TXSPTR]=0x1C20, [RXPTR]=0x1C24, [GRFTHR]=0x1
[GRFCNT]=0x1, [INTBASE]=0x1B04124, [INTPTR]=0x1B0413C
[RXSPTR]=0x1C20, [TXPTR]=0x1C3E, [CMASK32]=0xDEBB20E3
[TSATRX]=0x30003C20, [TSATTX]=0x30003C60, [CMASK16]=0xF0B8

QMC Timeslot Assignment Entries (Rx == Tx):
[ 0x0 0x0 0x0 0x0 0x0 0x0 0x0 0x0 0x0 0x0 0x0 0x0 0x0 0x0 0x0 0x0 0x0 0x0 0x0
0x0 0x0 0x0 0x0 0x540 0x8503 0x84C3 0x8483 0x0 0x400 0x400 0xC400 0xC000 ]

D Channel Information:

BVM unit 1,
qmc_channel: 18 timeslot: 26
idb at 0x1199FC8, driver data structure at 0x11D06D8
SCC Registers:
General [GSMR]=0x780:0x0000003A, Protocol-specific [PSMR]=0x80
Events [SCCE]=0x0000, Mask [SCCM]=0x000F, Status [SCCS]=0x0002
Transmit on Demand [TODR]=0x0, Data Sync [DSR]=0x7E7E
Interrupt Registers:
Config [CICR]=0x001B9981, Pending [CIPR]=0x00000240
Mask [CIMR]=0x7A000400, In-srv [CISR]=0x00000000
Command register [CR]=0x640
Port A [PADIR]=0x00F0, [PAPAR]=0xFFFF
[PAODR]=0x00E0, [PADAT]=0x1AEF
Port B [PBDIR]=0x01333F, [PBPAR]=0x01033E
[PBODR]=0x000030, [PBDAT]=0x00DFFC
Port C [PCDIR]=0x0C0C, [PCPAR]=0x0000
[PCSO]=0x03F3, [PCDAT]=0x00FF, [PCINT]=0x0000
Port D [PDDIR]=0x000760, [PDPAR]=0x00013F
[PDDAT]=0x000CB0
SI [SIMODE]=0x00480048, [SIGMR]=0x0E, [SISTR]=0x00
[SICR]=0x6D372E49
BRGC [BRGC1]=0x00000000, [BRGC2]=0x00000000

[BRGC3]=0x00000000, [BRGC4]=0x00000000

QMC CHANNEL PARAMETERS (at 0x30002480)
[TBASE]=0xBC0, [CHAMR]=0xB000, [TSTATE]=0x300C0FDE
[TBPTR]=0xBD0, [ZISTATE]=0xE1FF0FFF, [INTMSK]=0x3F
[RBASE]=0xB40, [MFLR]=0x5F4, [RSTATE]=0x31021C00
[RBPTR]=0xB70, [ZDSTATE]=0x25FFFFAE

buffer size 1524
RX ring with 16 entries at 0x1C4B978, Buffer size 1524
Rxhead = 0x1C4B9A8 (6), Rxp = 0x11D070C (6)
00 pak=0x145FDD0 buf=0x1CCE138 status=9000 pak_size=0
01 pak=0x145FBBC buf=0x1CCDA78 status=9000 pak_size=0
02 pak=0x145F9A8 buf=0x1CCD3B8 status=9000 pak_size=0
03 pak=0x145F794 buf=0x1CCCCF8 status=9000 pak_size=0
04 pak=0x14618D4 buf=0x1CD38F8 status=9000 pak_size=0
05 pak=0x14616C0 buf=0x1CD3238 status=9000 pak_size=0
06 pak=0x1461298 buf=0x1CD24B8 status=9000 pak_size=0

```

```

07 pak=0x1461084 buf=0x1CD1DF8 status=9000 pak_size=0
08 pak=0x1460E70 buf=0x1CD1738 status=9000 pak_size=0
09 pak=0x1460C5C buf=0x1CD1078 status=9000 pak_size=0
10 pak=0x1460A48 buf=0x1CD09B8 status=9000 pak_size=0
11 pak=0x1460834 buf=0x1CD02F8 status=9000 pak_size=0
12 pak=0x1460620 buf=0x1CCFC38 status=9000 pak_size=0
13 pak=0x146040C buf=0x1CCF578 status=9000 pak_size=0
14 pak=0x14601F8 buf=0x1CCEEB8 status=9000 pak_size=0
15 pak=0x145FFE4 buf=0x1CCE7F8 status=B000 pak_size=0

```

```

TX ring with 4 entries at 0x1C4B9F8, tx_count = 0
tx_head = 0x1C4BA08 (2), head_txp = 0x11D0818 (2)
tx_tail = 0x1C4BA08 (2), tail_txp = 0x11D0818 (2)
00 pak=0x0000000 buf=0x0000000 status=0000 pak_size=0
01 pak=0x0000000 buf=0x0000000 status=0000 pak_size=0
02 pak=0x0000000 buf=0x0000000 status=0000 pak_size=0
03 pak=0x0000000 buf=0x0000000 status=2000 pak_size=0
0 throttles, 0 enables
0 input aborts on receiving flag sequence
0 missed datagrams, 0 overruns
0 bad datagram encapsulations, 0 memory errors
0 transmitter underruns

```

B1 Channel Information:

```

BVM unit 1,
qmc_channel: 0 timeslot: 0
idb at 0x119FEB0, driver data structure at 0x11D0B54
SCC Registers:
General [GSMR]=0x0:0x00000000, Protocol-specific [PSMR]=0x0
Events [SCCE]=0x0000, Mask [SCCM]=0x0000, Status [SCCS]=0x0000
Transmit on Demand [TODR]=0x9080, Data Sync [DSR]=0xA4
QMC CHANNEL PARAMETERS (at 0x0)
[TBASE]=0x0, [CHAMR]=0x0, [TSTATE]=0x7C6802A6
[TBPTR]=0x9080, [ZISTATE]=0x906000AC, [INTMSK]=0x9060
[RBASE]=0x4800, [MFLR]=0x5, [RSTATE]=0x7C8000A6
[RBPTR]=0x7C9B, [ZDSTATE]=0x3864FFDC

```

```

buffer size 1524
RX ring with 0 entries at 0x0, Buffer size 1524
Rxhead = 0x0 (0), Rxp = 0x0 (-4670172)

```

```

TX ring with 0 entries at 0x0, tx_count = 0
tx_head = 0x0 (0), head_txp = 0x0 (-4670243)
tx_tail = 0x0 (0), tail_txp = 0x0 (-4670243)
0 throttles, 0 enables
0 input aborts on receiving flag sequence
0 missed datagrams, 0 overruns
0 bad datagram encapsulations, 0 memory errors
0 transmitter underruns

```

B2 Channel Information:

```

BVM unit 1,
qmc_channel: 0 timeslot: 0
idb at 0x11A5D98, driver data structure at 0x11D0F8C
SCC Registers:
General [GSMR]=0x0:0x00000000, Protocol-specific [PSMR]=0x0
Events [SCCE]=0x0000, Mask [SCCM]=0x0000, Status [SCCS]=0x0000
Transmit on Demand [TODR]=0x9080, Data Sync [DSR]=0xA4

```

```

QMC CHANNEL PARAMETERS (at 0x0)
[TBASE]=0x0, [CHAMR]=0x0, [TSTATE]=0x7C6802A6
[TBPTR]=0x9080, [ZISTATE]=0x906000AC, [INTMSK]=0x9060
[RBASE]=0x4800, [MFLR]=0x5, [RSTATE]=0x7C8000A6
[RBPTR]=0x7C9B, [ZDSTATE]=0x3864FFDC

buffer size 1524
RX ring with 0 entries at 0x0, Buffer size 1524
Rxhead = 0x0 (0), Rxp = 0x0 (-4670442)

TX ring with 0 entries at 0x0, tx_count = 0
tx_head = 0x0 (0), head_txp = 0x0 (-4670513)
tx_tail = 0x0 (0), tail_txp = 0x0 (-4670513)
0 throttles, 0 enables
0 input aborts on receiving flag sequence
0 missed datagrams, 0 overruns
--More--          0 bad datagram encapsulations, 0 memory
>errors
0 transmitter underruns

```

The following is an output example from the **show controllers bri** command:

```

Router# show controllers bri 0

BRI unit 0
D Chan Info:
Layer 1 is ACTIVATED
ldb 0x32089C, ds 0x3267D8, reset_mask 0x2
buffer size 1524
RX ring with 2 entries at 0x2101600 : Rxhead 0
00 pak=0x4122E8 ds=0x412444 status=D000 pak_size=0
01 pak=0x410C20 ds=0x410D7C status=F000 pak_size=0
TX ring with 1 entries at 0x2101640: tx_count = 0, tx_head = 0, tx_tail = 0
00 pak=0x000000 ds=0x000000 status=7C00 pak_size=0
0 missed datagrams, 0 overruns, 0 bad frame addresses
0 bad datagram encapsulations, 0 memory errors
0 transmitter underruns
B1 Chan Info:
Layer 1 is ACTIVATED
ldb 0x3224E8, ds 0x3268C8, reset_mask 0x0
buffer size 1524
RX ring with 8 entries at 0x2101400 : Rxhead 0
00 pak=0x421FC0 ds=0x42211C status=D000 pak_size=0
01 pak=0x4085E8 ds=0x408744 status=D000 pak_size=0
02 pak=0x422EF0 ds=0x42304C status=D000 pak_size=0
03 pak=0x4148E0 ds=0x414A3C status=D000 pak_size=0
04 pak=0x424D50 ds=0x424EAC status=D000 pak_size=0
05 pak=0x423688 ds=0x4237E4 status=D000 pak_size=0
06 pak=0x41AB98 ds=0x41ACF4 status=D000 pak_size=0
07 pak=0x41A400 ds=0x41A55C status=F000 pak_size=0
TX ring with 4 entries at 0x2101440: tx_count = 0, tx_head = 0, tx_tail = 0
00 pak=0x000000 ds=0x000000 status=5C00 pak_size=0
01 pak=0x000000 ds=0x000000 status=5C00 pak_size=0
02 pak=0x000000 ds=0x000000 status=5C00 pak_size=0
03 pak=0x000000 ds=0x000000 status=7C00 pak_size=0
0 missed datagrams, 0 overruns, 0 bad frame addresses
0 bad datagram encapsulations, 0 memory errors
0 transmitter underruns
B2 Chan Info:
Layer 1 is ACTIVATED
ldb 0x324520, ds 0x3269B8, reset_mask 0x2
buffer size 1524
RX ring with 8 entries at 0x2101500 : Rxhead 0

```

```

00 pak=0x40FCF0 ds=0x40FE4C status=D000 pak_size=0
01 pak=0x40E628 ds=0x40E784 status=D000 pak_size=0
02 pak=0x40F558 ds=0x40F6B4 status=D000 pak_size=0
03 pak=0x413218 ds=0x413374 status=D000 pak_size=0
04 pak=0x40EDC0 ds=0x40EF1C status=D000 pak_size=0
05 pak=0x4113B8 ds=0x411514 status=D000 pak_size=0
06 pak=0x416ED8 ds=0x417034 status=D000 pak_size=0
07 pak=0x416740 ds=0x41689C status=F000 pak_size=0
TX ring with 4 entries at 0x2101540: tx_count = 0, tx_head = 0, tx_tail = 0
00 pak=0x000000 ds=0x000000 status=5C00 pak_size=0
01 pak=0x000000 ds=0x000000 status=5C00 pak_size=0
02 pak=0x000000 ds=0x000000 status=5C00 pak_size=0
03 pak=0x000000 ds=0x000000 status=7C00 pak_size=0
0 missed datagrams, 0 overruns, 0 bad frame addresses
0 bad datagram encapsulations, 0 memory errors
0 transmitter underruns

```

Table 33 describes the significant fields in the display.

Table 33 *show controllers bri* Field Descriptions

| Field | Description |
|---------------------------------|--|
| BRI unit 0 | Interface type and unit number. |
| Chan Info | D and B channel numbers. |
| Layer 1 is ACTIVATED | Status can be DEACTIVATED, PENDING ACTIVATION, or ACTIVATED. |
| idb ds reset_mask | Information about internal data structures and parameters. |
| buffer size | Number of bytes allocated for buffers. |
| RX ring with - entries at - | Information about the Receiver Queue. |
| Rxhead | Start of the Receiver Queue. |
| pak ds status pak_size | Information about internal data structures and parameters. |
| TX ring with - entries at - | Information about the Transmitter Queue. |
| tx_count | Number of packets to transmit. |
| tx_head | Start of the transmit list. |
| tx_tail | End of the transmit list. |
| missed datagrams | Incoming packets missed due to internal errors. |
| overruns | Number of times the receiver hardware was unable to hand received data to a hardware buffer because the input rate exceeded the receiver's ability to handle the data. |
| bad frame addresses | Frames received with a cyclic redundancy check (CRC) error and noninteger number of octets. |

Table 33 show controllers bri Field Descriptions (continued)

| Field | Description |
|-----------------------------|--|
| bad datagram encapsulations | Packets received with bad encapsulation. |
| memory errors | Internal direct memory access (DMA) memory errors. |
| transmitter underruns | Number of times that the transmitter has been running faster than the router can handle. |

The following is a partial output example from the **show controllers bri** command on a Cisco 7200 series router:

```
BRI slot 2 interface 0 with integrated NT1
Layer 1 is ACTIVATED. (ISDN L1 State F7)
Master clock for slot 2 is bri interface 0.
Total chip configuration successes: 193, failures: 0, timeouts: 0
D Channel Information:
  Channel state: UP Channel IDB: 6092AC64
  RX ring entries: 5, buffer size 512
  RX descriptor ring: head = 165F4D8, tail = 165F508
  RX buffer ring: head = 6093A260, tail = 6093A290
  00 params=0x2000000 status=0x0 data ptr=0x1650F84 next ptr=0x165F4D8
  01 params=0x2000000 status=0xC0080000 data ptr=0x1651884 next ptr=0x165F4E8
  02 params=0x2000000 status=0xC0080000 data ptr=0x1651644 next ptr=0x165F4F8
  03 params=0x2000000 status=0x0 data ptr=0x1651404 next ptr=0x165F508
  04 params=0x42000000 status=0x0 data ptr=0x16511C4 next ptr=0x165F4C8
  TX ring entries: 5, in use: 0, buffer size 512
  TX descriptor ring: head = 3C2049C0, tail = 3C2049C0
  TX buffer ring: head = 608EC0C4, tail = 608EC0C4
  00 params=0x80000000 data ptr=0x00000000 next ptr=0x4D0049A8
  01 params=0x80000000 data ptr=0x00000000 next ptr=0x4D0049B4
  02 params=0x80000000 data ptr=0x00000000 next ptr=0x4D0049C0
  03 params=0xC0000000 data ptr=0x00000000 next ptr=0x4D0049CC
  04 params=0x0 data ptr=0x00000000 next ptr=0x4D00499C
List of timeslots (sw): 2
```

Table 34 describes the significant fields in the display.

Table 34 show controllers bri Field Descriptions (for Cisco 7200 Series Routers)

| Field | Description |
|--|--|
| BRI slot 2 interface 0 with integrated NTI | Interface type and slot and port number. |
| Layer 1 is ACTIVATED | Status can be DEACTIVATED, PENDING ACTIVATION, or ACTIVATED. |
| Master clock | The first interface that comes up on an MBRI port adapter holds the master clock. This clock is used for all interfaces on that port adapter. If the master clock interface goes down, the second interface that came up becomes the master clock interface. |
| Total chip configuration successes | Counters of successful chip configuration. |
| failures | Counters of bad chip configuration. |
| timeouts | Counters of failing to initialize chip. |
| D Channel Information | Information related to D-channel status. |

Table 34 *show controllers bri Field Descriptions (for Cisco 7200 Series Routers) (continued)*

| Field | Description |
|------------------------------------|---|
| Channel state | Channel state can be UNUSED, IDLE, DOWN, STANDBY, UP, THROTTLED, ILLEGAL. |
| Channel IDB | Internal interface channel description. |
| RX (or TX) ring entries | Internal receive queue. |
| RX (or TX) descriptor ring | Internal receive queue to manage hardware chip |
| RX (or TX) buffer ring | Internal receive queue to hold inbound packets. |
| Rxhead | Start of the receiver queue. |
| params, status, data ptr, next ptr | Information about internal data structures and params. |
| List of timeslots (sw) | Timeslots assigned to this channel. |

show controllers e1

To display information about the E1 links supported by the Network Processor Module (NPM) (Cisco 4000 series) or MultiChannel Interface Processor (MIP) (Cisco 7500 series), use the **show controllers e1** command in privileged EXEC mode.

Cisco 7500 series routers

```
show controllers e1 [slot/port]
```

Cisco 4000 series routers

```
show controllers e1 number
```

| Syntax Description | slot/port | (Optional) Backplane slot number and port number on the interface. See your hardware installation manual for the specific slot and port numbers. |
|--------------------|-----------|--|
| | number | NPM number, in the range 0 through 2. |

| Command Modes | Privileged EXEC |
|---------------|-----------------|
|---------------|-----------------|

| Command History | Release | Modification |
|-----------------|---------|------------------------------|
| | 11.2 | This command was introduced. |

Usage Guidelines The NPM or MIP can query the port adapters to determine their current status. Issue a **show controllers e1** command to display statistics about the E1 link.

If you specify a slot and port number, each 15-minute period will be displayed.

This command displays controller status that is specific to the controller hardware. The information displayed is generally useful for diagnostic tasks performed by technical support personnel only.

Examples The following is an output example from the **show controllers e1** command on the Cisco 7500 series:

```
Router# show controllers e1

e1 0/0 is up.
  Applique type is Channelized E1 - unbalanced
  Framing is CRC4, Line Code is HDB3
  No alarms detected.
  Data in current interval (725 seconds elapsed):
    0 Line Code Violations, 0 Path Code Violations
    0 Slip Secs, 0 Fr Loss Secs, 0 Line Err Secs, 0 Degraded Mins
    0 Errored Secs, 0 Bursty Err Secs, 0 Severely Err Secs, 0 Unavail Secs
  Total Data (last 24 hours)
    0 Line Code Violations, 0 Path Code Violations,
    0 Slip Secs, 0 Fr Loss Secs, 0 Line Err Secs, 0 Degraded Mins,
    0 Errored Secs, 0 Bursty Err Secs, 0 Severely Err Secs, 0 Unavail Secs
```

Following is an example of the **show controllers e1** display including the board identifier type:

```
Router# show controllers e1
```

```
E1 4/1 is up.
No alarms detected.
Framing is CRC4, Line Code is hdb3
Data in current interval (0 seconds elapsed):
  0 Line Code Violations, 0 Path Code Violations 0 Slip Secs, 0 Fr Loss Secs,
  0 Line Err Secs, 0 Degraded Mins 0 Errored Secs, 0 Bursty Err Secs,
  0 Severely Err Secs, 0 Unavail Secs
Total Data (last 79 15 minute intervals):
  0 Line Code Violations, 0 Path Code Violations, 0 Slip Secs, 0 Fr Loss Secs,
  0 Line Err Secs, 0 Degraded Mins, 0 Errored Secs, 0 Bursty Err Secs,
  0 Severely Err Secs, 0 Unavail Secs
```

Table 35 describes the **show controllers e1** display fields.

Table 35 *show controllers e1 Field Descriptions*

| Field | Description |
|--|---|
| e1 0/0 is up. | The E1 controller 0 in slot 0 is operating. The controller's state can be up, down, or administratively down. Loopback conditions are shown by (Locally Looped) or (Remotely Looped). |
| Applique type | The applique type is shown and will indicate balanced or unbalanced. |
| Framing is | Shows the current framing type. |
| Linecode is | Shows the current linecode type. |
| No alarms detected. | Any alarms detected by the controller are displayed here. Possible alarms are as follows: <ul style="list-style-type: none"> • Transmitter is sending remote alarm. • Transmitter is sending AIS. • Receiver has loss of signal. • Receiver is getting AIS. • Receiver has loss of frame. • Receiver has remote alarm. • Receiver has no alarms. |
| Data in current interval (725 seconds elapsed) | Shows the current accumulation period, which rolls into the 24 hour accumulation every 15 minutes. Accumulation period is from 1 to 900 seconds. The oldest 15-minute period falls off the back of the 24-hour accumulation buffer. |
| Line Code Violations | Indicates the occurrence of either a Bipolar Violation (BPV) or Excessive Zeros (EXZ) error event. |
| Path Code Violations | Indicates a frame synchronization bit error in the D4 and E1-noCRC formats, or a CRC error in the ESF and E1-CRC formats. |
| Slip Secs | Indicates the replication or deletion of the payload bits of a DS1 frame. A slip might be performed when there is a difference between the timing of a synchronous receiving terminal and the received signal. |
| Fr Loss Secs | Indicates the number of seconds an Out Of Frame (OOF) error is detected. |

Table 35 *show controllers e1 Field Descriptions (continued)*

| Field | Description |
|-------------------|--|
| Line Err Secs | Line Errored Seconds (LES) is a second in which one or more Line Code Violation errors are detected. |
| Degraded Mins | A Degraded Minute is one in which the estimated error rate exceeds 1E-6 but does not exceed 1E-3. |
| Errored Secs | In ESF and E1 CRC links, an Errored Second is a second in which one of the following are detected: one or more Path Code Violations; one or more Out of Frame defects; one or more Controlled Slip events; a detected AIS defect. For SF and E1 no-CRC links, the presence of Bipolar Violations also triggers an Errored Second. |
| Bursty Err Secs | A second with fewer than 320 and more than 1 Path Coding Violation error, no Severely Errored Frame defects and no detected incoming AIS defects. Controlled slips are not included in this parameter. |
| Severely Err Secs | For ESF signals, a second with one of the following errors: 320 or more Path Code Violation errors; one or more Out of Frame defects; a detected AIS defect. For E1-CRC signals, a second with one of the following errors: 832 or more Path Code Violation errors; one or more Out of Frame defects. For E1-nonCRC signals, a second with 2048 Line Code Violations or more. For D4 signals, a count of 1-second intervals with Framing Errors, or an Out of Frame defect, or 1544 Line Code Violations. |
| Unavail Secs | A count of the total number of seconds on the interface. |

show controllers e1 call-counters

To view the total number of calls and call durations on an E1 controller, use the **show controllers e1 call-counters** command in privileged EXEC mode.

show controllers e1 *number* call-counters

| | | |
|---------------------------|---------------|---|
| Syntax Description | <i>number</i> | Controller number (for example, 0, 1, 2, or 3). |
|---------------------------|---------------|---|

| | |
|----------------------|-----------------|
| Command Modes | Privileged EXEC |
|----------------------|-----------------|

| | | |
|------------------------|----------------|------------------------------|
| Command History | Release | Modification |
| | 11.3T | This command was introduced. |

| | |
|-------------------------|---|
| Usage Guidelines | This command displays the E1 controller status as calls, such as switched 56K digital calls, pass through the hardware. |
|-------------------------|---|

Examples The following is an example of output for the **show controller e1 1 call-counters** command:

```
router# show controller e1 1 call-counters
E1 1:
  DS0's Active: 0
  DS0's Active High Water Mark: 0
  TimeSlot  Type  TotalCalls  TotalDuration
    1         cas         0         00:00:00
    2         cas         0         00:00:00
    3         cas         0         00:00:00
    4         cas         0         00:00:00
    5         cas         0         00:00:00
    6         cas         0         00:00:00
    7         cas         0         00:00:00
    8         cas         0         00:00:00
    9         cas         0         00:00:00
   10         cas         0         00:00:00
   11         cas         0         00:00:00
   12         cas         0         00:00:00
   13         cas         0         00:00:00
   14         cas         0         00:00:00
   15         cas         0         00:00:00
   16         cas         0         00:00:00
   17         cas         0         00:00:00
   18         cas         0         00:00:00
   19         cas         0         00:00:00
   20         cas         0         00:00:00
   21         cas         0         00:00:00
   22         cas         0         00:00:00
   23         cas         0         00:00:00
   24         cas         0         00:00:00
```

Total DS0's Active High Water Mark: 7

Table 36 describes the fields seen from the **show controller e1 1 call-counters** command.

Table 36 *show controllers e1 call-counters Field Descriptions*

| Field | Description |
|-------------------------------------|---|
| E1 number: | Number of the E1 controller. |
| DS0's Active: | Displays the number of DS0s channels that are currently active. |
| DS0's Active High Water Mark: | Number of active DS0s that are approaching the threshold ceiling of the system. |
| TimeSlot | Timeslot number used on the controller for the specified DS0. |
| Type | Type of call occupying the timeslot. This entry is usually CAS or ISDN PRI. |
| TotalCalls | How many calls came in on this timeslot or DS0. |
| TotalDuration | Total active time for all previous successful calls on the specified timeslot. |
| Total DS0's Active High Water Mark: | Total number of active DS0s that are approaching the threshold ceiling of the system. |

Related Commands

| Command | Description |
|-------------------------------------|---|
| show controllers e1 cas-data | Displays internal call switching module information about the switched 56k data channels. |
| cas-group (E1 controller) | Configures CAS on an E1 controller. |

show controllers e1 cas-data

To display internal call switching module information about the switched 56K data channels, use the **show controllers e1 cas-data** command in privileged EXEC mode.

show controllers e1 *number* cas-data

| Syntax Description | <i>number</i> | Controller number (for example, 0, 1, 2, or 3). |
|--------------------|---------------|---|
|--------------------|---------------|---|

| Command Modes | Privileged EXEC |
|---------------|-----------------|
|---------------|-----------------|

| Command History | Release | Modification |
|-----------------|---------|------------------------------|
| | 11.3T | This command was introduced. |

Examples

The following is an output example for the **show controller e1 1 cas-data** command:

```
router# show controller e1 1 cas-data
Device Pool: Dev-SW56-pool
Number of SW56 vdev in pool: 48
Number of active connections: 0
No free SW56 device in pool: 0
SW56 max allocated messages: 96

E1 1:
SW56(slot/subcont/bchan)=0/1/0, hwidb=0x00867348
  csm_state(0x00000100)=CSM_IDLE_STATE, csm_event_proc=0x0006CCC2
  total_call_duration=00:00:00
  invalid_event_count=0, wdt_timeout_count=0
  ic_failure=0, ic_complete=0, remote_link_disc=0
  csm_status(0): VDEV_STATUS_UNLOCKED
  wdt_timestamp_started is not activated
SW56(slot/subcont/bchan)=0/1/1, hwidb=0x0086EC58
  csm_state(0x00000100)=CSM_IDLE_STATE, csm_event_proc=0x0006CCC2
  total_call_duration=00:00:00
  invalid_event_count=0, wdt_timeout_count=0
  ic_failure=0, ic_complete=0, remote_link_disc=0
  csm_status(0): VDEV_STATUS_UNLOCKED
  wdt_timestamp_started is not activated
SW56(slot/subcont/bchan)=0/1/2, hwidb=0x00876568
  csm_state(0x00000100)=CSM_IDLE_STATE, csm_event_proc=0x0006CCC2
  total_call_duration=00:00:00
  invalid_event_count=0, wdt_timeout_count=0
  ic_failure=0, ic_complete=0, remote_link_disc=0
  csm_status(0): VDEV_STATUS_UNLOCKED
  wdt_timestamp_started is not activated
SW56(slot/subcont/bchan)=0/1/3, hwidb=0x0087DE78
  csm_state(0x00000100)=CSM_IDLE_STATE, csm_event_proc=0x0006CCC2
  total_call_duration=00:00:00
  invalid_event_count=0, wdt_timeout_count=0
  ic_failure=0, ic_complete=0, remote_link_disc=0
  csm_status(0): VDEV_STATUS_UNLOCKED
  wdt_timestamp_started is not activated
```

```

SW56(slot/subcont/bchan)=0/1/4, hwidb=0x00885788
csm_state(0x00000100)=CSM_IDLE_STATE, csm_event_proc=0x0006CCC2
total_call_duration=00:00:00
invalid_event_count=0, wdt_timeout_count=0
ic_failure=0, ic_complete=0, remote_link_disc=0
csm_status(0): VDEV_STATUS_UNLOCKED
wdt_timestamp_started is not activated

```

Table 37 describes the output for the **show controller e1 1 cas-data** command.

Table 37 *show controllers e1 cas-data Field Descriptions*

| Field | Description |
|--|--|
| Device Pool: | Type of pool in service, which is a logical grouping used to achieve a specific service. |
| Number of SW56 vdev in pool: | Number of serial devices used in the pool. |
| Number of active connections: | Number of active switched 56K active connections. |
| No free SW56 device in pool: | Number of switched 56K channels are available to accept calls. |
| SW56 max allocated messages: | Number of messages that are allocated to switched 56K services. |
| E1 number: | Number of the controller E1. |
| SW56(slot/subcont/bchan)= | Specified DS0 or timeslot used for the switched 56K service. |
| csm_state(0x00000100)= | Call state machine register. |
| total_call_duration= | How long the call lasted. |
| invalid_event_count= | Number of invalid event counters for the specified channel. |
| ic_failure= | Number of incoming call failures. |
| csm_status(0): | Call state machine register. |
| wdt_timestamp_started is not activated | Watch dog timer. |

Related Commands

| Command | Description |
|--|--|
| cas-group (E1 controller) | Configures CAS on an E1 controller. |
| show controllers e1 call-counters | Displays the total number of calls and call durations on an E1 controller. |

show controllers t1 call-counters

To view the total number of calls and call durations on a T1 controller, use the **show controllers t1 call-counters** command in privileged EXEC mode.

show controllers t1 *number* call-counters

| Syntax Description | <i>number</i> | Controller number (for example, 0, 1, 2, or 3). |
|--------------------|---------------|---|
|--------------------|---------------|---|

| Command Modes | Privileged EXEC |
|---------------|-----------------|
|---------------|-----------------|

| Command History | Release | Modification |
|-----------------|---------|------------------------------|
| | 11.3T | This command was introduced. |

| Usage Guidelines | This command displays the T1 controller status as calls, such as switched 56K digital calls, pass through the hardware. |
|------------------|---|
|------------------|---|

| Examples | The following is an output example for the show controllers t1 1 call-counters command: |
|----------|--|
|----------|--|

```
router# show controllers t1 1 call-counters
T1 1:
  DS0's Active: 0
  DS0's Active High Water Mark: 0
  TimeSlot  Type  TotalCalls  TotalDuration
    1         cas         0         00:00:00
    2         cas         0         00:00:00
    3         cas         0         00:00:00
    4         cas         0         00:00:00
    5         cas         0         00:00:00
    6         cas         0         00:00:00
    7         cas         0         00:00:00
    8         cas         0         00:00:00
    9         cas         0         00:00:00
   10         cas         0         00:00:00
   11         cas         0         00:00:00
   12         cas         0         00:00:00
   13         cas         0         00:00:00
   14         cas         0         00:00:00
   15         cas         0         00:00:00
   16         cas         0         00:00:00
   17         cas         0         00:00:00
   18         cas         0         00:00:00
   19         cas         0         00:00:00
   20         cas         0         00:00:00
   21         cas         0         00:00:00
   22         cas         0         00:00:00
   23         cas         0         00:00:00
   24         cas         0         00:00:00
```

```
Total DS0's Active High Water Mark: 7
```

Table 38 describes the an output example for the **show controllers t1 1 call-counters** command.

Table 38 *show controllers t1 call-counters Field Descriptions*

| Field | Description |
|-------------------------------------|---|
| T1 number: | Number of the T1 controller. |
| DS0's Active: | Displays the number of DS0s channels that are currently active. |
| DS0's Active High Water Mark: | Number of active DS0s that are approaching the threshold ceiling of the system. |
| TimeSlot | Timeslot number used on the controller for the specified DS0. |
| Type | Type of call occupying the timeslot. This entry is usually CAS or ISDN PRI. |
| TotalCalls | How many calls came in on this timeslot or DS0. |
| TotalDuration | Total active time for all previous successful calls on the specified timeslot. |
| Total DS0's Active High Water Mark: | Total number of active DS0s that are approaching the threshold ceiling of the system. |

Related Commands

| Command | Description |
|-------------------------------------|---|
| cas-group (t1 controller) | Configures channelized T1 timeslots with robbed bit signalling. |
| show controllers t1 cas-data | Displays internal call switching module information about the switched 56-kbps data channels. |

show controllers t1 cas-data

To display internal call switching module information about the switched 56K data channels, use the **show controllers t1 cas-data** command in privileged EXEC mode.

show controllers t1 *number* cas-data

| | | |
|---------------------------|-----------------|---|
| Syntax Description | <i>number</i> | Controller number (for example, 0, 1, 2, or 3). |
| Command Modes | Privileged EXEC | |
| Command History | Release | Modification |
| | 11.3T | This command was introduced. |

Examples

The following is an output example for the **show controllers t1 1 cas-data** command:

```
router# show controllers t1 1 cas-data
Device Pool: Dev-SW56-pool
Number of SW56 vdev in pool: 48
Number of active connections: 0
No free SW56 device in pool: 0
SW56 max allocated messages: 96

T1 1:
SW56(slot/subcont/bchan)=0/1/0, hwidb=0x00867348
  csm_state(0x00000100)=CSM_IDLE_STATE, csm_event_proc=0x0006CCC2
  total_call_duration=00:00:00
  invalid_event_count=0, wdt_timeout_count=0
  ic_failure=0, ic_complete=0, remote_link_disc=0
  csm_status(0): VDEV_STATUS_UNLOCKED
  wdt_timestamp_started is not activated
SW56(slot/subcont/bchan)=0/1/1, hwidb=0x0086EC58
  csm_state(0x00000100)=CSM_IDLE_STATE, csm_event_proc=0x0006CCC2
  total_call_duration=00:00:00
  invalid_event_count=0, wdt_timeout_count=0
  ic_failure=0, ic_complete=0, remote_link_disc=0
  csm_status(0): VDEV_STATUS_UNLOCKED
  wdt_timestamp_started is not activated
SW56(slot/subcont/bchan)=0/1/2, hwidb=0x00876568
  csm_state(0x00000100)=CSM_IDLE_STATE, csm_event_proc=0x0006CCC2
  total_call_duration=00:00:00
  invalid_event_count=0, wdt_timeout_count=0
  ic_failure=0, ic_complete=0, remote_link_disc=0
  csm_status(0): VDEV_STATUS_UNLOCKED
  wdt_timestamp_started is not activated
SW56(slot/subcont/bchan)=0/1/3, hwidb=0x0087DE78
  csm_state(0x00000100)=CSM_IDLE_STATE, csm_event_proc=0x0006CCC2
  total_call_duration=00:00:00
  invalid_event_count=0, wdt_timeout_count=0
  ic_failure=0, ic_complete=0, remote_link_disc=0
  csm_status(0): VDEV_STATUS_UNLOCKED
  wdt_timestamp_started is not activated
```

```

SW56(slot/subcont/bchan)=0/1/4, hwidb=0x00885788
 csm_state(0x00000100)=CSM_IDLE_STATE, csm_event_proc=0x0006CCC2
 total_call_duration=00:00:00
 invalid_event_count=0, wdt_timeout_count=0
 ic_failure=0, ic_complete=0, remote_link_disc=0
 csm_status(0): VDEV_STATUS_UNLOCKED
 wdt_timestamp_started is not activated

```

Table 39 describes the output for the **show controller t1 1 cas-data** command.

Table 39 *show controllers t1 cas-data Field Descriptions*

| Field | Description |
|--|--|
| Device Pool: | Type of pool in service, which is a logical grouping used to achieve a specific service. |
| Number of SW56 vdev in pool: | Number of serial devices used in the pool. |
| Number of active connections: | Number of active switched 56K active connections. |
| No free SW56 device in pool: | Number of switched 56K channels are available to accept calls. |
| SW56 max allocated messages: | Number of messages that are allocated to switched 56K services. |
| T1 number: | Number of the controller T1. |
| SW56(slot/subcont/bchan)= | Specified DS0 or timeslot used for the switched 56K service. |
| csm_state(0x00000100)= | Call state machine register. |
| total_call_duration= | How long the call lasted. |
| invalid_event_count= | Number of invalid event counters for the specified channel. |
| ic_failure= | Number of incoming call failures. |
| csm_status(0): | Call state machine register. |
| wdt_timestamp_started is not activated | Watch dog timer. |

Related Commands

| Command | Description |
|--|---|
| cas-group (t1 controller) | Configures channelized T1 timeslots with robbed bit signalling. |
| show controllers t1 call-counters | Displays the total number of calls and call durations on a T1 controller. |

show cot dsp

To display information about the Continuity Test (COT) Digital Signal Processor configuration (DSP) or current status, use the **show cot dsp** command in privileged EXEC mode.

Cisco AS5200 and Cisco AS5300

```
show cot dsp { config | status } applique/ds0
```

Cisco AS5800

```
show cot dsp { config | status } shelf/slot/applique/ds0
```

| Syntax | Description |
|-----------------|---|
| config | Shows the COT DSP configuration. |
| status | Shows the COT DSP status. |
| <i>applique</i> | ID of the hardware unit that provides the external interface connections from a router to the network. Number of COT operation request. |
| <i>ds0</i> | Number of COT operation request. |
| <i>shelf</i> | Shelf ID of COT operation request. |
| <i>slot</i> | Designates the slot number, 0 to 2. |

Defaults

Privileged EXEC

Command History

| Release | Modification |
|---------|------------------------------|
| 11.3(7) | This command was introduced. |

Examples

The following is sample output from the **show cot dsp** command that shows the COT DSP configuration.

```
5300# show cot dsp status 1/1
```

```
Rx Freq 2010 Hx
Tx Freq 1780 Hx
Tx then Rx mode
in WaitRxOn state
```

```
5300# show cot dsp config 1/1
```

```
Rx Freq 2010 Hx
Tx Freq 1780 Hx
Tx then Rx mode
Timeout value:0
```

Table 40 describes the fields in these displays.

Table 40 *show cot dsp config Field Descriptions*

| Field | Description |
|--------------|----------------------------------|
| Rx Freq | The COT receive tone frequency. |
| Tx Freq | The COT transmit tone frequency. |
| Tx then Rx | Type of COT operation. |
| WaitRxOn | The state of the COT DSP. |

Related Commands

| Command | Description |
|--------------------------|--|
| clear cot summary | Resets the COT counters displayed by the show cot summary command. |
| debug cot | Troubleshoots COT operation. |
| show cot request | Displays COT request information. |
| show cot summary | Displays information about the COT activity. |

show cot request

To display information about COT operation requests, use the **show cot request** command in privileged EXEC mode.

Cisco AS5200 and Cisco AS5300

```
show cot request shelf/slot/applique/ds0
```

Cisco AS5800

```
show cot request applique/ds0
```

| Syntax Description | shelf | Shelf ID of COT operation request. |
|--------------------|----------|---|
| | slot | Designate the slot number, 1 to 4. |
| | applique | Hardware unit that provides the external interface connections from a router to the network. Number of COT operation request. |
| | ds0 | Number of COT operation request. |

Command Modes Privileged EXEC

| Release | Modification |
|---------|------------------------------|
| 11.3(7) | This command was introduced. |

Examples

The following is sample output from the **show cot request** command.

```
5300# show cot request 1/1
00:19:29:COT Request@ 0x61064A20, CDB@ 0x60EBB48C, Params@0x61123DBC
00:19:29: request type = COT_CHECK_TONE_ON
00:19:29: shelf 0 slot 0 appl_no 1 ds0 1
00:19:29: duration 100000 key FFF1 freqTx 1780 freqRx 2010
00:19:29: state COT_WAIT_TD_ON_CT
00:19:29: event_proc (0x6093B55C)
```

Table 41 describes the fields in these displays.

Table 41 *show cot request Field Descriptions*

| Field | Description |
|--------------|--|
| COT Request | Internal COT operation request. |
| CDB | Internal controller information. |
| Params | Internal COT operation request parameters. |
| request type | Type of COT operation. |
| duration | Timeout duration of COT operation. |
| key | COT operation identifier. |
| freqTx | Transmit tone frequency. |
| freqRx | Receive tone frequency. |
| state | COT subsystem machine state. |
| event_proc | COT subsystem state machine function. |

Related Commands

| Command | Description |
|--------------------------|---|
| clear cot summary | Resets the COT counters displayed by the show cot summary command. |
| debug cot | Troubleshoots COT operation. |
| show cot dsp | Displays information about the COT DSP configuration or current status. |
| show cot summary | Displays information about the COT activity. |

show cot summary

To display information about the Continuity Test (COT) activity, use the **show cot summary** command in privileged EXEC mode.

show cot summary

Syntax Description This command has no arguments or keywords.

Command Modes Privileged EXEC

| Command History | Release | Modification |
|-----------------|---------|------------------------------|
| | 11.3(7) | This command was introduced. |

Examples The following is sample output from the **show cot summary** command that shows the COT DSP configuration:

```
5300# show cot summary
router#
08:23:24: COT Subsystem - Request Statistics

08:23:24: COT Request Type = COT_DS0_LOOPBACK_ON
08:23:24: # of request(s) : 4 # of restart requests(s) : 0
08:23:24: # of successful request(s): 4 # of invalid request(s) : 0
08:23:24: # of cot timeout(s) : 0 # of dsp error(s) : 0
08:23:24: # of no dsp(s) : 0

08:23:24: COT Request Type = COT_DS0_LOOPBACK_OFF
08:23:24: # of request(s) : 4 # of restart requests(s) : 0
08:23:24: # of successful request(s): 4 # of invalid request(s) : 0
08:23:24: # of cot timeout(s) : 0 # of dsp error(s) : 0
08:23:24: # of no dsp(s) : 0

08:23:24: COT Request Type = COT_CHECK_TONE_ON
08:23:24: # of request(s) : 7 # of restart requests(s) : 0
08:23:24: # of successful request(s): 3 # of invalid request(s) : 2
08:23:24: # of cot timeout(s) : 1 # of dsp error(s) : 0
08:23:24: # of no dsp(s) : 0

08:23:24: COT Request Type = COT_CHECK_TONE_OFF
08:23:24: # of request(s) : 0 # of restart requests(s) : 0
08:23:24: # of successful request(s): 0 # of invalid request(s) : 0
08:23:24: # of cot timeout(s) : 0 # of dsp error(s) : 0
08:23:24: # of no dsp(s) : 0
```

```

08:23:24: COT Request Type = COT_CUT_IN_TRANSPONDER
08:23:24: # of request(s)           : 0           # of restart requests(s) : 0
08:23:24: # of successful request(s) : 0           # of invalid request(s)  : 0
08:23:24: # of cot timeout(s)            : 0           # of dsp error(s)        : 0
08:23:24: # of no dsp(s)                 : 0

08:23:24: COT Request Type = COT_CUT_OUT_TRANSPONDER
08:23:24: # of request(s)           : 0           # of restart requests(s) : 0
08:23:24: # of successful request(s) : 0           # of invalid request(s)  : 0
08:23:24: # of cot timeout(s)            : 0           # of dsp error(s)        : 0
08:23:24: # of no dsp(s)                 : 0

```

Table 42 describes the fields in these displays.

Table 42 *show cot dsp summary Field Descriptions*

| Field | Description |
|----------------------------|---|
| # of request(s) | Number of COT operation requests. |
| # of successful request(s) | Number of successful COT operation requests. |
| # of cot timeout(s) | Number of COT subsystem timeouts. |
| # of no dsp(s) | Number of COT operation requests rejected because of unavailable DSP. |
| # of restart request(s) | Number of COT operation requests restarted. |
| # of invalid request(s) | Number of invalid COT operation requests. |
| # of dsp error(s) | Number of DSP errors. |

Related Commands

| Command | Description |
|--------------------------|---|
| clear cot summary | Resets the COT counters displayed by the show cot summary command. |
| debug cot | Troubleshoots COT operation. |
| show cot dsp | Displays information about the COT DSP configuration or current status. |
| show cot request | Displays COT request information. |

show dhcp

To display the current DHCP (Dynamic Host Configuration Protocol) settings on point-to-point interfaces, use the **show dhcp** command in privileged EXEC mode.

```
show dhcp {server | lease [interface async [number]]}
```

Syntax Description

| | |
|---------------------------------|--|
| server | Show known DHCP servers. |
| lease | Show DHCP addresses leased from a server. |
| interface async [number] | (Optional) Specify asynchronous interfaces and, optionally, a specific interface number. |

Command Modes

Privileged EXEC

Command History

| Release | Modification |
|---------|------------------------------|
| 11.1 | This command was introduced. |

Usage Guidelines

If you omit the optional argument, the **show dhcp** command displays information about all interfaces. You can use this command on any point-to-point type of interface (for example, serial, ISDN, and asynchronous) that uses DHCP for temporary IP address allocation.

Examples

The following is an output example from the **show dhcp server** command:

```
Router# show dhcp server

IP address pooling for Point to Point clients is: DHCP Proxy Client
DHCP Proxy Client Status:
  DHCP server: ANY (255.255.255.255)
    Leases: 0
    Offers: 0      Requests: 0      Acks: 0      Naks: 0
    Declines: 0    Releases: 0      Bad: 0
```

Table 43 describes the fields shown in the display.

Table 43 show dhcp Field Descriptions

| Field | Description |
|----------|--|
| Leases | Number of current leased IP addresses. |
| Offers | Number of offers for an IP address sent to a proxy-client from the server. |
| Requests | Number of requests for an IP address to the server. |
| Acks | Number of “acknowledge” messages sent by the server to the proxy-client. |
| Naks | Number of “not acknowledge” messages sent by the server to the proxy-client. |
| Declines | Number of offers from the server that are declined by the proxy-client. |

Table 43 *show dhcp Field Descriptions (continued)*

| Field | Description |
|----------|---|
| Releases | Number of times IP addresses have been relinquished gracefully by the client. |
| Bad | Number of bad packets received from wrong length, wrong field type, etc. |

Related Commands

| Command | Description |
|--------------------------------|--|
| ip address-pool | Enables an address pooling mechanism used to supply IP addresses to dial-in asynchronous, synchronous, or ISDN point-to-point interfaces. |
| ip dhcp-server | Specifies which DHCP servers to use on a network, and specifies the IP address of one or more DHCP servers available on the network. |
| peer default ip address | Specifies an IP address, an address from a specific IP address pool, or an address from the DHCP mechanism to be returned to a remote peer connecting to this interface. |

show dialer

To display general diagnostic information for interfaces configured for DDR (dial-on-demand routing), use the **show dialer** command in EXEC mode.

show dialer [*interface type number*]

| Syntax Description | interface | (Optional) Displays information for the interface specified by the arguments <i>type</i> and <i>number</i> . |
|--------------------|---------------|--|
| | <i>type</i> | (Optional) Interface type. |
| | <i>number</i> | (Optional) Interface number. |

Command Modes EXEC

| Command History | Release | Modification |
|-----------------|---------|------------------------------|
| | 10.0 | This command was introduced. |

Usage Guidelines If you enter the **show dialer interface** command for the D channel of an ISDN BRI or PRI, the command output also displays the B channels. That is, the **show dialer interface bri 0** command displays information of interfaces bri 0, bri 0:1, and bri 0:2. The **show dialer interface serial 0:23** command (for a channelized T1 line configured for ISDN PRI) displays information for serial interfaces 0:23, 0:0, 0:1, and so forth to 0:22.

If you have defined a dialer group that consists of the interfaces serial 0, serial 1, and bri 2, the **show dialer interface dialer 1** command displays information for interfaces bri 0, bri 0:1, bri 0:2, serial 1, and serial 0.

Examples The following is an output example from the **show dialer** command for a BRI interface when dialer profiles are configured:

```
impulse# show dialer interface bri 0

BRI0 - dialer type = ISDN

Dial String      Successes  Failures   Last called  Last status

0 incoming call(s) have been screened.

BRI0: B-Channel 1
Idle timer (120 secs), Fast idle timer (20 secs)
Wait for carrier (30 secs), Re-enable (15 secs)

Dialer state is data link layer up

Dial reason: ip (s=6.1.1.8, d=6.1.1.1)

Interface bound to profile Dialer0
```

```

Time until disconnect 102 secs
Current call connected 00:00:19
Connected to 5773872 (wolfman)

BRI0: B-Channel 2
Idle timer (120 secs), Fast idle timer (20 secs)
Wait for carrier (30 secs), Re-enable (15 secs)
Dialer state is idle

```

Table 44 describes significant fields shown in the display.

Table 44 *show dialer interface bri Field Descriptions*

| Field | Description |
|--|--|
| BRI0 - dialer type = ISDN | ISDN dialer. |
| Dial String | Dial strings of logged calls (telephone numbers). On ISDN BRI interfaces, if you have specified a subaddress number in the dialer string , this number is included in the dial string after a colon. |
| Successes | Successful connections (even if no data is passed). |
| Failures | Failed connections; call not successfully completed. |
| Last called | Time that last call occurred to specific dial string. |
| Last status | Status of last call to specific dial string (successful or failed). |
| 0 incoming call(s) have been screened. | Number of calls subjected to Dialer Profiles screening to determine how the call is to be treated. |
| BRI0: B-Channel 1 | Header indicating the following data is for B channel 1. |
| Idle timer (120 secs), Fast idle timer (20 secs) | Settings (in seconds) for the idle timer and the fast idle timer. |
| Wait for carrier (30 secs), Re-enable (15 secs) | Settings (in seconds) for the wait for carrier timer and the reenable timer. |
| Dialer state is data link layer up | The message “data link layer up” suggests that the dialer came up properly; if it says anything else then dialer did not come up properly. The message “physical layer up” means the line protocol (LCP) came up, but the NCP did not come up. The show interfaces command also provides the similar information. |
| Dial reason: ip (s=6.1.1.8, d=6.1.1.1) | What initiated the dial, namely an IP packet, plus source and destination address in the packet. |
| Interface bound to profile Dialer0 | Dialer profile that is bound to this interface or B channel. |
| Time until disconnect | Time until line is configured to disconnect. |
| Current call connected | Time at which the current call was connected. |
| Connected to | Dial string to which line is currently connected. |

The following is an output example from the **show dialer** command for an asynchronous interface:

```
Router# show dialer interface async 1

Async1 - dialer type = IN-BAND NO-PARITY
Idle timer (900 secs), Fast idle timer (20 secs)
Wait for carrier (30 secs), Re-enable (15 secs)
Time until disconnect 838 secs
Current call connected 0:02:16
Connected to 8986

Dial String      Successes  Failures  Last called  Last status
8986             0          0         never       Defaults
8986             8          3         0:02:16    Success     Defaults
```

Table 45 describes significant fields shown in the display.

Table 45 show dialer interface async Field Descriptions for In-Band Dialers

| Field | Description |
|----------------------------|---|
| Async 1 | Name of an asynchronous interface. |
| dialer type = IN-BAND | Indicates that DDR is enabled. |
| Idle timer (900 secs) | Idle timeout specification (in seconds). |
| Fast idle timer (20 secs) | Fast idle timer specification (in seconds). |
| Wait for carrier (30 secs) | Wait for carrier timer specification (in seconds). |
| Re-enable (15 secs) | Enable timeout specification (in seconds). |
| Time until disconnected | Time until line is configured to disconnect. |
| Current call connected | Time at which the current call was connected. |
| Connected to | Dial string to which line is currently connected. |
| Dial String | Dial strings of logged calls (telephone numbers). On ISDN BRI interfaces, if you have specified a subaddress number in the dialer string or dialer map command, this number is included in the dial string after a colon. |
| Successes | Successful connections (even if no data is passed). |
| Failures | Failed connections; call not successfully completed. |
| Last called | Time that last call occurred to specific dial string. |
| Last status | Status of last call to specific dial string (successful or failed). |
| Defaults | If the DDR facility is using the dial string specified with the dialer string command, the word <i>Defaults</i> is appended to the Last status entry. |

When the **show dialer EXEC** command is issued for a synchronous serial interface configured for DTR dialing, output similar to the following is displayed:

```
Serial 0 - dialer type = DTR SYNC
Idle timer (120 secs), Fast idle timer (20 secs)
Wait for carrier (30 secs), Re-enable (15 secs)

Dial String      Successes  Failures  Last called  Last status
----            1          0         1:04:47    Success     DTR dialer
8986             0          0         never       Defaults
```

Table 46 describes additional fields shown in the display.

Table 46 *show dialer Field Descriptions for DTR Dialers*

| Field | Description |
|----------------------|--|
| DTR SYNC | Indicates that DDR is enabled and that DTR dialing is enabled on this synchronous interface. |
| Last status: Success | Indicates that the last call was successful and that DTR dialing was used. |
| DTR dialer | Phrase appended to the Last status entry to indicate that this is a DTR dialer. |

If an interface is connected to a destination, a display is provided that indicates the idle time before the line is disconnected. (The value decrements each second.) Then the duration of the current connection is shown. The following shows an example of this display; it appears after the third line in the **show dialer** command display:

```
Time until disconnect 596 secs
Current call connected 0:00:25
```

After a call disconnects, the system displays the time remaining before being it can dial again. The following is an example of this display; it appears after the third line in the **show dialer** display:

```
Time until interface enabled 8 secs
```

If the **show dialer** command is issued for an interface on which DDR is not enabled, the system displays an error message. The following is a sample error message:

```
Async 1 - Dialing not enabled on this interface.
```

If an interface is configured for DDR, the **show interfaces** command displays the following message:

```
Async1 is up, line protocol is up (spoofing)
Hardware is Async Serial
```

The word *spoofing* indicates that the line really is not up, but the dialer is forcing the line to masquerade as “up” so that upper level protocols will continue to operate as expected. Spoofing is a state added to allow DDR to work. The interface “dials on demand” in response to packets being routed to it. But because no packets are routed to down interfaces, the interface must pretend to be up (spoof) so packets will be routed to it when it is not connected. Spoofing is the normal idle state on a dial-on-demand interface.

If caller ID screening is configured on an ISDN BRI, the **show dialer** command display includes a line similar to the following:

```
1 incoming call(s) have been screened.
```

This line reports the number of calls that have been screened.

show dialer dnis

To see how many calls DNIS groups have had, use the **show dialer dnis** command in privileged EXEC mode.

```
show dialer dnis {group [name] | number [number]}
```

| Syntax Description | group | Displays DNIS group statistics. |
|--------------------|---------------|--|
| | <i>name</i> | (Optional) DNIS group name. |
| | number | Displays DNIS group number statistics. |
| | <i>number</i> | (Optional) DNIS group number. |

Defaults None. If no DNIS groups are configured and resource pooling is enabled, then no calls are accepted. All calls are identified by calltype/DNIS combinations.

Command Modes Privileged EXEC

| Command History | Release | Modification |
|-----------------|-----------|------------------------------|
| | 12.0(4)XI | This command was introduced. |

Usage Guidelines Use the **show dialer dnis** EXEC command to see how many calls DNIS groups have had or how many calls a specific DNIS group has had. You can configure each DNIS group with multiple numbers. Using this command shows tables of statistics for each DNIS number received at the NAS.

Examples The following example shows the **show dialer dnis** command being used to display DNIS group and DNIS number statistics:

```
Router# show dialer dnis ?
  group  DNIS group statistics
  number DNIS number statistics

Router# show dialer dnis group
List of DNIS Groups:
  default
  mdm_grp1

Router# show dialer dnis group mdm_grp1
DNIS Number:2001
  0 total connections
  0 peak connections
  0 calltype mismatches
DNIS Number:2002
  0 total connections
  0 peak connections
  0 calltype mismatches
```

```

DNIS Number:2003
  0 total connections
  0 peak connections
  0 calltype mismatches
DNIS Number:2004
  0 total connections
  0 peak connections
  0 calltype mismatches

Router# show dialer dnis number
List of Numbers:
  default
  2001
  2002
  2003
  2004

Router# show dialer dnis number 2001
DNIS Number:2001
  0 connections total
  0 peak connections
  0 call-type mismatches

```

Table 47 shows the significant field descriptions.

Table 47 *show dialer dnis Field Descriptions*

| Field | Description |
|---------------------|--|
| List of DNIS Groups | List of DNIS groups assigned. |
| List of Numbers | List of DNIS numbers currently assigned. |
| DNIS Number | Dialed Number Information Service number assigned to specific customers. |
| Total connections | Cumulative number of connections since the last clear command was used. |
| Peak connections | Cumulative number of peak connections since the last clear command was used. |
| Calltype mismatches | Cumulative number of calltype mismatches since the last clear command was used. |

Related Commands

| Command | Description |
|--------------------------|--|
| clear dialer dnis | Resets the counter statistics associated with a specific DNIS group or number. |

show dialer interface bri

To display general diagnostic information for ISDN BRI interfaces configured for DDR (dial-on-demand routing), use the **show dialer interface bri** command in EXEC mode.

show dialer interface bri *number*

| | | |
|---------------------------|---------------|-----------------------|
| Syntax Description | <i>number</i> | BRI interface number. |
|---------------------------|---------------|-----------------------|

| | |
|----------------------|------|
| Command Modes | EXEC |
|----------------------|------|

| | | |
|------------------------|----------------|------------------------------|
| Command History | Release | Modification |
| | 9.21 | This command was introduced. |

Examples

If you enter the **show dialer interface bri** command for the D channel of an ISDN BRI, the command output also displays the B channels. That is, the **show dialer interface bri 0** command displays information of interfaces bri 0, bri 0:1, and bri 0:2. Similarly, use of the related **show dialer interface serial 0:23** command (for a channelized T1 line configured for ISDN PRI) displays information for serial interfaces 0:23, 0:0, 0:1, and so forth to 0:22.

If you have defined a dialer group that consists of the interfaces serial 0, serial 1, and bri 2, the **show dialer interface dialer 1** command displays information for interfaces bri 0, bri 0:1, bri 0:2, serial 1, and serial 0.

The following is an output example from the **show dialer interface bri** command for a BRI interface when dialer profiles are configured:

```
impulse# show dialer interface bri 0

BRI0 - dialer type = ISDN

Dial String      Successes   Failures    Last called   Last status

0 incoming call(s) have been screened.

BRI0: B-Channel 1
Idle timer (120 secs), Fast idle timer (20 secs)
Wait for carrier (30 secs), Re-enable (15 secs)

Dialer state is data link layer up

Dial reason: ip (s=6.1.1.8, d=6.1.1.1)

Interface bound to profile Dialer0

Time until disconnect 102 secs
Current call connected 00:00:19
Connected to 5773872 (wolfman)

BRI0: B-Channel 2
Idle timer (120 secs), Fast idle timer (20 secs)
Wait for carrier (30 secs), Re-enable (15 secs)
Dialer state is idle
```

Table 48 describes significant fields shown in the display.

Table 48 show dialer interface bri Field Descriptions

| Field | Description |
|--|---|
| BRI0 - dialer type = ISDN | ISDN dialer. |
| Dial string | Dial strings of logged calls (telephone numbers). On ISDN BRI interfaces, if you have specified a subaddress number in the dialer string , this number is included in the dial string after a colon. |
| Successes | Successful connections (even if no data is passed). |
| Failures | Failed connections; call not successfully completed. |
| Last called | Time that last call occurred to specific dial string. |
| Last status | Status of last call to specific dial string (successful or failed). |
| 0 incoming call(s) have been screened. | Number of calls subjected to Dialer Profiles screening to determine how the call is to be treated. |
| BRI0: B-Channel 1 | Header indicating the following data is for B channel 1. |
| Idle timer (120 secs), Fast idle timer (20 secs) | Settings (in seconds) for the idle timer and the fast idle timer. |
| Wait for carrier (30 secs), Reenable (15 secs) | Settings (in seconds) for the wait for carrier timer and the reenable timer. |

Table 48 *show dialer interface bri Field Descriptions (continued)*

| Field | Description |
|--|--|
| Dialer state is data link layer up | The message “data link layer up” suggests that the dialer came up properly; if it says anything else then dialer did not come up properly. The message “physical layer up” means the line protocol (LCP) came up, but the NCP did not come up. The show interfaces command also provides the similar information. |
| Dial reason: ip (s=6.1.1.8, d=6.1.1.1) | What initiated the dial, namely an IP packet, plus source and destination address in the packet. |
| Interface bound to profile Dialer0 | Dialer profile that is bound to this interface or B channel. |
| Time until disconnect | Time until line is configured to disconnect. This field is displayed if the interface is currently connected to a destination. |
| Current call connected | Time at which the current call was connected. |
| Connected to | Dial string to which line is currently connected. |

If an interface is connected to a destination, a display is provided that indicates the idle time before the line is disconnected. (The value decrements each second.) Then the duration of the current connection is shown. The following shows an example of this display; it appears after the third line in the **show dialer** display:

```
Time until disconnect 596 secs
Current call connected 0:00:25
```

After a call disconnects, the system displays the time remaining before being it can dial again. The following is an example of this display; it appears after the third line in the **show dialer** display:

```
Time until interface enabled 8 secs
```

If caller ID screening is configured on an ISDN BRI, the **show dialer** command display includes a line similar to the following:

```
1 incoming call(s) have been screened.
```

This line reports the number of calls that have been screened.

show dialer map

To display configured dynamic and static dialer maps and dynamically created PPP BACP temporary static dialer maps, use the **show dialer map** command in EXEC mode.

show dialer map

Syntax Description This command has no arguments or keywords.

Command Modes EXEC

| Command History | Release | Modification |
|-----------------|---------|------------------------------|
| | 11.2 | This command was introduced. |

Examples

The following is an output example from the **show dialer map** command. The dialer maps are grouped by network address. When multiple dialer maps exist for the same network address, the dialer maps differ only by phone number. In this output, the dialer maps marked “BAP” are temporary dialer maps the PPP BACP creates when a peer calls from a different phone number than is configured or when a peer calls from a number that does not appear in an existing map. The temporary dialer maps allows PPP BACP to make outgoing calls to the peers.

```
bap_peer# show dialer map

Static dialer map ip 6.1.1.1 name peer_1 on Dialer1
Static dialer map ip 6.1.1.2 name peer_2 on Dialer1
BAP dialer map ip 6.1.1.2 name peer_2 on Dialer1
Dynamic dialer map ip 6.1.1.3 name peer_3 on Dialer1
BAP dialer map ip 6.1.1.3 name peer_3 on Dialer1
```

Table 49 describes the significant fields in this output.

Table 49 *show dialer map Field Descriptions*

| Field | Description |
|------------------------------|---|
| Static dialer map ip 6.1.1.1 | This is a configured static dialer map to call the specified protocol address. |
| name peer_1 | Name of the remote peer. |
| on Dialer1 | The physical or logical dialer interface on which the static map is configured. |
| BAP dialer map ip 6.1.1.2 | This is a temporary dialer map that was created by PPP BACP for the particular destination with a different phone number from that of any existing maps. It will be removed when the BACP group is removed or the last remaining map to that destination is removed. |

Table 49 *show dialer map Field Descriptions (continued)*

| Field | Description |
|---------------------------------------|---|
| Dynamic dialer map ip 6.1.1.3 | Dialer map dynamically created when a peer called. |
| BAP dialer map ip 6.1.1.3 name peer_3 | Temporary static dialer map created by PPP BACP when required. It will be removed when the BACP group is removed or when the dynamic dialer map disappears. |

Related Commands

| Command | Description |
|-------------------|--|
| dialer map | Configures a serial interface or ISDN interface to call one or multiple sites or to receive calls from multiple sites. |

show dialer sessions

To display all dialer sessions, use the **show dialer sessions** command in EXEC configuration mode.

show dialer sessions

Syntax Description This command has no arguments or keywords.

Command Modes EXEC

| Command History | Release | Modification |
|-----------------|----------|------------------------------|
| | 12.0(3)T | This command was introduced. |

Examples In the following example, a Cisco 5300 router is dialing out to a Cisco 5200 router. All dialer sessions are displayed:

```
router# show dialer sessions
```

```
DSES 0xAF0: index = 0x0, state = 3, ip addr = 11.2.2.22, dialed number = 81067, name = p5
200_pri.cisco.com, connected interface = Serial0:22
```

Table 50 describes the fields seen in this display.

Table 50 *show dialer sessions Field Descriptions*

| Field | Description |
|---------------------|--|
| ip addr | IP address of the remote interface that has been dialed into. |
| dialed number | Number that was used to dial out. |
| name | Name of the interface dialed into. This can be different from the router name, as names can be changed on per-interface basis. |
| connected interface | The channel on which the call is connected. |

| Related Commands | Command | Description |
|------------------|------------------------------|--|
| | clear dialer sessions | Removes all dialer sessions and disconnect links when connected. |

show entry

To display the list of queued host-initiated connections to a router, use the **show entry** command in EXEC mode. You can also use this command to determine which LAT (local-area transport) hosts have queue entries for printers on routers.

show entry

Syntax Description This command has no arguments or keywords.

Command Modes EXEC

| Command History | Release | Modification |
|-----------------|---------|------------------------------|
| | 11.1 | This command was introduced. |

Examples The following is an output example from the **show entry** command. The display shows that two LAT connections are waiting for access to port 5. The list is ordered so that the lower numbered entry has been waiting longer, and will get to use the line next.

```
sloth# show entry

1 waiting 0:02:22 for port 5 from LAT node BLUE
2 waiting 0:00:32 for port 5 from LAT node STELLA
```

Table 51 describes the fields in the first line of output shown in the display.

Table 51 *show entry* Field Descriptions

| Field | Description |
|--------------------|--|
| 1 | Number assigned to the queued connection attempt. |
| waiting 0:02:22 | Interval (hours:minutes:seconds) during which the connection attempt has been waiting. |
| for port 5 | Port for which the connection attempt is waiting. |
| from LAT node BLUE | Name of the user (BLUE) attempting to make the connection. |