

dspport

Display Port—PXM1E

The **dspport** command displays the configuration of a logical port. The displayed information is shown in the example. For a description of each item, see **addport**.

The total number of connections in the display includes control VCs. The types of control VCs are SSCOP, PNNI-RCC, and ILMI (if ILMI is enabled). To see the connection counts that do not include control VCs, use **dsppnport**.

When a PXM1E card rebuilds, it provisions the UNI/NNI back card from the stored database on the PXM disk. If the SCT file associated with a specific port is missing or corrupted, the default SCT file is applied to that port. This is indicated in the **dspport** output by the string:

“!Default SCT used!”



Note

The SCT ID that **dspport** shows pertains to the port. For the card-level SCT ID, use **dspscd**.

Syntax

dspport <*ifNum*>

Syntax Description

<i>ifNum</i>	A logical port (interface) number. Only one logical port is allowed if the line operates as a UNI or NNI. For the virtual interfaces (such as VNNI), multiple ports can exist on a line. The range for <i>ifNum</i> is 1–31.
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Related Commands

addport, **dnport**, **dsports**

Attributes

Log: no State: active, standby Privilege: ANYUSER

Example

Display the port configuration for logical port 10.

```
pxmlenode.7.PXM.a > dspport 10
  Interface Number           : 10
  Line Number                : 2.2           IMA Group Number       : N/A
  Admin State                : Up           Operational State      : LowerLayerDown
  Guaranteed bandwidth(cells/sec): 20000     Number of partitions   : 1
  Maximum bandwidth(cells/sec): 20000     Number of SPVC        : 0
  ifType                    : UNI           Number of SPVP        : 0
  VPI number (VNNI, VUNI)   : 0           Number of SVC         : 0
  MIN VPI (EVNNI, EVUNI)   : 0           MAX VPI (EVNNI, EVUNI): 0
  SCT Id (Conf./InUse)     : 0/0=Def
  F4 to F5 Conversion      : Disabled
```

pxmlenode.7.PXM.a >

dspportcnt

Display Port Counters—PXM1E

Displays ATM cell counters for a logical port. Refer to the example for contents.

PXM1E Syntax

dspportcnt <ifNum> <intvl>

Syntax Description

<i>ifNum</i>	The range for interface number is 1–31.
<i>intvl</i>	The time interval to display (0–96). 0 is the current 15-minute interval. 1 is the most recent 15-minute interval. 2 is the next most recent 15-minute interval, and so on. 96 being the oldest 15-minute interval.

Related Commands

dspports, **dspport**, **cnfport**, **dspcds**

Attributes

Log: no State: active, standby Privilege: ANYUSER

Example

Display port counters on logical port (*ifNum*) 1.

```
Unknown.7.PXM.a > dspportcnt 1 50
Interface Num           : 1
Interval Num           : 50
Egr Rcv Clp0 Cells     : 0
Egr Rcv Clp1 Cells     : 0
Egr Clp0 Disc Cells    : 0
Egr Clp1 Disc Cells    : 0
Egr Xmt Clp0 Cells     : 0
Egr Xmt Clp1 Cells     : 0
Egr Rcv OAM Cells      : 0
Egr Rcv RM Cells       : 0
Egr Xmt EFCI Cells     : 0
Egr Rcv EFCI Cells     : 0
Egr Xmt OAM Cells      : 0

Unknown.7.PXM.a >
```

dspportconstats

Display Port Connection Statistics—PXM45, PXM1E

The **dspportconstats** command shows a count of successful and failed routing attempts through either a single PNNI port or all ports on the switch. The display has following categories:

- Successful connections at the originating node
- Successful connections at a border node
- Failed connections at the originating node
- Failed connections at a border node
- Crankbacks received at the originating node
- Crankbacks received at a border node
- Crankbacks initiated by the current point

Syntax

dspportconstats [*portid*]

Syntax Description

<i>portid</i>	The format of the optional PNNI physical port identifier can vary, as follows: <ul style="list-style-type: none"> • On a PXM45: <i>slot:subslot.port:subport</i> • On a PXM1E for UNI/NNI back card: <i>slot:subslot.port:subport</i>. On the UNI/NNI back card, the subslot is always 2, but the <i>slot</i> depends on the chassis, as follows: <ul style="list-style-type: none"> – In an MGX 8850 chassis, <i>slot</i> is always the logical slot 7. – In an MGX 8830 chassis, <i>slot</i> is always the logical slot 1. • On a PXM1E for a narrowband service module (NBSM): <i>slot.port</i>.
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For more details, see the section, “PNNI Format,” in [Chapter 1, “Introduction.”](#)

Related Commands

clrportconstats, dspnodalconstats, clrnodalconstats

Attributes

Log: no State: active, standby Privilege: ANYUSER

Examples

Display SPVC/SPVP routing statistics for port 3:1.1:1.

```
spvc4.7.PXM.a > dspportconstats 3:1.1:1

SPVC connection stats for port 3:1.1:1
-----
Con success at orig node   :      7674  Con success at border node   :      0
Con failed  at orig node   :      3453  Con failed  at border node   :      0
Rcv Crankback at orig node:      1480  Rcv Crankback at border node:      0
Initiate Crankback       :      2291
```

```
spvc4.7.PXM.a >
```

Display the SPVC and SPVP connection stats for all PNNI ports on the switch. Note that the displays for the BITS ports 7.35 and 7.36 are meaningless. Also, the example has been truncated due to its length.

```
spvc4.7.PXM.a > dspportconstats

SPVC connection stats for port 7.35
-----
Con success at orig node   :      0  Con success at border node   :      0
Con failed  at orig node   :      0  Con failed  at border node   :      0
Rcv Crankback at orig node:      0  Rcv Crankback at border node:      0
Initiate Crankback       :      0

SPVC connection stats for port 7.36
-----
Con success at orig node   :      0  Con success at border node   :      0
Con failed  at orig node   :      0  Con failed  at border node   :      0
Rcv Crankback at orig node:      0  Rcv Crankback at border node:      0
Initiate Crankback       :      0

SPVC connection stats for port 7.37
-----
Con success at orig node   :      0  Con success at border node   :      0
Con failed  at orig node   :      0  Con failed  at border node   :      0
Rcv Crankback at orig node:      0  Rcv Crankback at border node:      0

Type <CR> to continue, Q<CR> to stop:
Initiate Crankback       :      0

SPVC connection stats for port 7.38
-----
Con success at orig node   :      0  Con success at border node   :      0
Con failed  at orig node   :      0  Con failed  at border node   :      0
Rcv Crankback at orig node:      0  Rcv Crankback at border node:      0
Initiate Crankback       :      0

SPVC connection stats for port 1:1.1:1
-----
Con success at orig node   :      0  Con success at border node   :      0
Con failed  at orig node   :      0  Con failed  at border node   :      0
Rcv Crankback at orig node:      0  Rcv Crankback at border node:      0
Initiate Crankback       :      16
```

```
SPVC connection stats for port 1:1.2:2
```

```
-----
Con success at orig node :          0  Con success at border node :          0
```

```
Type <CR> to continue, Q<CR> to stop:
```

```
Con failed  at orig node :          0  Con failed at border node :          0
Rcv Crankback at orig node:          0  Rcv Crankback at border node:        0
Initiate Crankback      :            8
```

```
SPVC connection stats for port 1:1.3:3
```

```
-----
Con success at orig node :          0  Con success at border node :          0
Con failed  at orig node :          0  Con failed at border node :          0
Rcv Crankback at orig node:          0  Rcv Crankback at border node:        0
Initiate Crankback      :           14
```

```
SPVC connection stats for port 1:1.4:4
```

```
-----
Con success at orig node :          0  Con success at border node :          0
Con failed  at orig node :          0  Con failed at border node :          0
Rcv Crankback at orig node:          0  Rcv Crankback at border node:        0
Initiate Crankback      :           13
```

```
SPVC connection stats for port 1:1.5:5
```

```
Type <CR> to continue, Q<CR> to stop:
```

```
-----
Con success at orig node :          0  Con success at border node :          0
Con failed  at orig node :          0  Con failed at border node :          0
Rcv Crankback at orig node:          0  Rcv Crankback at border node:        0
Initiate Crankback      :           20
```

```
SPVC connection stats for port 1:1.6:6
```

```
-----
Con success at orig node :          0  Con success at border node :          0
Con failed  at orig node :          0  Con failed at border node :          0
Rcv Crankback at orig node:          0  Rcv Crankback at border node:        0
Initiate Crankback      :            8
```

```
SPVC connection stats for port 1:1.7:7
```

```
-----
Con success at orig node :          0  Con success at border node :          0
Con failed  at orig node :          0  Con failed at border node :          0
Rcv Crankback at orig node:          0  Rcv Crankback at border node:        0
Initiate Crankback      :            2
```

```
Type <CR> to continue, Q<CR> to stop:
```

dspportload

Display Port Load—PXM1E

The **dspportload** command displays the current number of ingress and egress cells per second on a logical port (*ifNum*). This command can help you determine the current state of a port. Using the parameters displayed by **dspon**, you can see if the current load on the port needs modification or troubleshooting.

Syntax

```
dspportload <ifNum>
```

Syntax Description

<i>ifNum</i>	The range for interface number is 1–31.
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Related Commands

dsports, **dspport**, **cnfport**

Attributes

Log: no	State: active, standby	Privilege: ANYUSER
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Example

Display the load on logical port 1.

```
M8850_LA.7.PXM1E.a > dspportload 1
Getting the stats. Please wait ...
          Ingress      Egress
Cell rate (cps)      : 0          0
```

dsports

Display Ports—PXM1E

The **dsports** command displays the following general information about all logical ports on the card:

- Logical port number (*ifNum*).
- Physical line number in the format *bay.port*.
- Operation status—whether the port is up or down.
- The minimum guaranteed rate in cells per second.
- The maximum allowed rate for the port in cells per second.
- The ID of the port-level SCT (see **addport**).
- The type of interface.
- A VPI number (applies to only VNNIs or VUNIS).
- Minimum and maximum VPIs (applies to only EVNNIs or EVUNIs).
- An IMA group number if one exists.

Syntax

```
dsports
```

Related Commands

addport, cnfport, delpport, dsport

Attributes

Log: no State: active, standby Privilege: ANYUSER

Example

Display the logical ports.

```
pxmlenode.7.PXM.a > dsports
ifNum Line Admin Operational Guaranteed Maximum sctID ifType VPI MINVPI MAXVPI IMA
      State State Rate Rate Conf./InUse (VNNI, (EVUNI, (EVUNI, GRP
      (VUNI) EVNNI) EVNNI)
-----
  10  2.2   Up LowerLayerDown   20000   20000   0/ 0 =Def   UNI      0      0      0 N/A
```

```
MGX-PXM1E.8.PXM.a > dsports
ifNum Line Admin Operational Guaranteed Maximum sctID ifType VPI MINVPI MAXVPI IMA
      State State Rate Rate Conf./InUse (VNNI, (EVUNI, (EVUNI, GRP
      (VUNI) EVNNI) EVNNI)
-----
   1  N/A   Up LowerLayerDown    7000    7000   0/ 0 =Def   UNI      0      0      0 2.1
   2  N/A   Up LowerLayerDown    7000    7000   0/ 0 =Def   UNI      0      0      0 2.2
  31  2.1   Up LowerLayerDown    3000    3000   0/ 0 =Def   UNI      0      0      0 N/A
```

```
MGX-PXM1E.8.PXM.a >
```

dsportsct

Display Port SCT—PXM1E

Displays the contents of the service class template (SCT) on a port. See the description of the **addport** command for information on SCTs.



Note

Currently, the system does not support certain parameters in the service class templates (SCTs), so you can specify them through **addcon**, **cnfcon**, or Cisco WAN Manager. These parameters are (when applicable) PCR, SCR, and ICR.

Syntax

```
dsportsct <abr | bw | gen | cosb | vcThr | cosThr> <ifnum>
```

Syntax Description

abr A specific part of the SCT, as follows:

- gen**
 - **abr**: available bit rate
- cosb**
 - **gen**: general VC
- vcThr**
 - **cosb**: class of service buffer
- cosThr**
 - **vcThr**: VC thresholds
 - **cosThr**: COSB thresholds

ifnum The range for interface number is 1–31.

Related Commands

addport, **cnfport**, **delpport**, **dspport**

Attributes

Log: no State: active, standby Privilege: ANYUSER

Examples SCT 2

This section displays all parameters for port SCT 2.

```
MGX8850.1.AXSM.a > dspportsct bw 2
```

```
-----+
Service Class Template [2] : Bw and Policing Parameters
-----+
| SERV-TYPE | PCR | SCR | MCR | MBS | CDVT | ICR |
-----+
| VSI-SIG | 00001000 | 01000000 | 00000000 | 00000050 | 00250000 | 00000000 |
| CBR.1 | 00001000 | 00000000 | 00000000 | 00000001 | 00250000 | 00000000 |
| VBR-RT.1 | 00001000 | 01000000 | 00000000 | 00000050 | 00250000 | 00000000 |
| VBR-RT.2 | 00001000 | 01000000 | 00000000 | 00000050 | 00250000 | 00000000 |
| VBR-RT.3 | 00001000 | 01000000 | 00000000 | 00000050 | 00250000 | 00000000 |
| VBR-nRT.1 | 00001000 | 01000000 | 00000000 | 00000050 | 00250000 | 00000000 |
| VBR-nRT.2 | 00001000 | 01000000 | 00000000 | 00000050 | 00250000 | 00000000 |
| VBR-nRT.3 | 00001000 | 01000000 | 00000000 | 00000050 | 00250000 | 00000000 |
| UBR.1 | 00000010 | 00000000 | 00000000 | 00000001 | 00250000 | 00000000 |
| UBR.2 | 00000010 | 00000000 | 00000000 | 00000001 | 00250000 | 00000000 |
| ABR | 00000010 | 00000000 | 01000000 | 00000001 | 00250000 | 00000000 |
| CBR.2 | 00001000 | 00000000 | 00000000 | 00000001 | 00250000 | 00000000 |
| CBR.3 | 00001000 | 00000000 | 00000000 | 00000001 | 00250000 | 00000000 |
-----+

```

Display the policing and CAC parameters (parameter “gen”) for SCT 2. To confirm that the current card-level SCT is SCT 2, use the **dspcd** command.

```
MGX8850.1.AXSM.a > dspportsct gen 2
```

```
-----+
Service Class Template [2] : General Parameters
-----+
| SERV-TYPE | COSB_NUM | CAC_TYPE | UPC_ENB | CLP-SELEC | GCRA-1 | GCRA-2 | CI-CNTRL |
-----+
| VSI-SIG | 00000016 | B-CAC | GCRA 1 & 2 | 000000002 | DISCARD | DISCARD | DISABLED |
| CBR.1 | 00000003 | B-CAC | GCRA1-ENB | 000000003 | DISCARD | DISCARD | DISABLED |
| VBR-RT.1 | 00000004 | B-CAC | GCRA 1 & 2 | 000000002 | DISCARD | DISCARD | DISABLED |
| VBR-RT.2 | 00000004 | B-CAC | GCRA 1 & 2 | 000000001 | DISCARD | DISCARD | DISABLED |
| VBR-RT.3 | 00000004 | B-CAC | GCRA 1 & 2 | 000000001 | DISCARD | SET-CLP | DISABLED |
| VBR-nRT.1 | 00000005 | B-CAC | GCRA 1 & 2 | 000000002 | DISCARD | DISCARD | DISABLED |
| VBR-nRT.2 | 00000005 | B-CAC | GCRA 1 & 2 | 000000001 | DISCARD | DISCARD | DISABLED |
| VBR-nRT.3 | 00000005 | B-CAC | GCRA 1 & 2 | 000000001 | DISCARD | SET-CLP | DISABLED |
| UBR.1 | 00000006 | LCN_CAC | GCRA1-ENB | 000000003 | DISCARD | DISCARD | DISABLED |
| UBR.2 | 00000006 | LCN_CAC | GCRA1-ENB | 000000003 | DSCD/SET-CLP | DISCARD | DISABLED |
| ABR | 00000001 | B-CAC | GCRA1-ENB | 000000003 | DISCARD | DISCARD | ENABLED |
| CBR.2 | 00000003 | B-CAC | GCRA 1 & 2 | 000000001 | DISCARD | DISCARD | DISABLED |
| CBR.3 | 00000003 | B-CAC | GCRA 1 & 2 | 000000001 | DISCARD | SET-CLP | DISABLED |
-----+

```

Display the Class of Service Buffer parameters for SCT 2 Note the following:

- Min-Rate and Max-Rate do not apply in the current product.
- Excess-Priority is a scheme for distributing excess bandwidth. The lowest number is the highest priority for a connection to receive excess bandwidth. If two or more connections have equal priority, the excess bandwidth is equally distributed between them.
- Explicit Rate Stamping (ERS) applies to only ABR connections.

Cell loss ratio (CLR) is currently hard-coded, so do not attempt to modify it through the Cisco WAN Manager application or the CLI commands.

dsportsct

```
MGX8850.1.AXSM.a > dsportsct cosb 2
```

```
-----+
|Service Class Template [02] : COSB Parameters
-----+
| COSB | MIN-RATE | MAX-RATE | MIN-PRIORITY | EXCESS-PRIORITY | ERS ENABLE | CLR |
-----+
| 0001 | 00000000 | 00000100 | 000 | 002 | DISABLE | 10^-06 |
| 0002 | 00000000 | 00000100 | 000 | 002 | DISABLE | 10^-06 |
| 0003 | 00000000 | 00000100 | 000 | 000 | DISABLE | 10^-10 |
| 0004 | 00000000 | 00000100 | 000 | 001 | DISABLE | 10^-08 |
| 0005 | 00000000 | 00000100 | 000 | 001 | DISABLE | 10^-06 |
| 0006 | 00000000 | 00000100 | 000 | 002 | DISABLE | 10^-06 |
| 0007 | 00000000 | 00000100 | 000 | 002 | DISABLE | 10^-06 |
| 0008 | 00000000 | 00000100 | 000 | 002 | DISABLE | 10^-06 |
| 0009 | 00000000 | 00000100 | 000 | 002 | DISABLE | 10^-06 |
| 0010 | 00000000 | 00000100 | 000 | 002 | DISABLE | 10^-06 |
| 0011 | 00000000 | 00000100 | 000 | 002 | DISABLE | 10^-06 |
| 0012 | 00000000 | 00000100 | 000 | 002 | DISABLE | 10^-06 |
| 0013 | 00000000 | 00000100 | 000 | 002 | DISABLE | 10^-06 |
| 0014 | 00000000 | 00000100 | 000 | 002 | DISABLE | 10^-06 |
| 0015 | 00000000 | 00000100 | 000 | 002 | DISABLE | 10^-06 |
| 0016 | 00000000 | 00000100 | 000 | 000 | DISABLE | 10^-06 |
-----+

```

Display VC thresholds for SCT 2. Note the following:

The Scaling COSB value applies to congestion in a Class of Service Buffer: if a particular buffer becomes congested, this scaling factor determines the how quickly the rate at which cells enter the buffer is throttled back (until the buffer is no longer congested, at which time normal rates resume).

The Scaling Log-If is a scaling factor that applies to congestion on an entire port: when the whole port is congested, this factor determines the rate at which traffic is throttled back (until the port is no longer congested, at which time normal rates resume).

```
MGX8850.1.AXSM.a > dsportsct vcThr 2
```

```
-----+
|Service Class Template [2] : VC Threshold Parameters
-----+
| SERV-TYPE | VC THRESH | PACKET | MAX_CELL | EFCI | CLP_HI | EPD0 | CLP_LO | SCALING | SCALING |
| | TBL IDX | MODE | THRESH | | | | EPD1 | COSB | Log-If |
-----+
| VSI-SIG | 002 | DSB | 0000005000 | 1000000 | 0800000 | 0600000 | 0800000 | 0000002 | 0000002 |
| CBR.1 | 003 | DSB | 0000002500 | 1000000 | 0800000 | 0600000 | 0800000 | 0000001 | 0000001 |
| VBR-RT.1 | 004 | DSB | 0000005000 | 1000000 | 0800000 | 0600000 | 0800000 | 0000002 | 0000002 |
| VBR-RT.2 | 005 | DSB | 0000005000 | 1000000 | 0800000 | 0600000 | 0800000 | 0000002 | 0000002 |
| VBR-RT.3 | 006 | DSB | 0000005000 | 1000000 | 0800000 | 0600000 | 0800000 | 0000002 | 0000002 |
| VBR-nRT.1 | 007 | DSB | 0000025000 | 1000000 | 0800000 | 0600000 | 0800000 | 0000002 | 0000002 |
| VBR-nRT.2 | 008 | DSB | 0000025000 | 1000000 | 0800000 | 0600000 | 0800000 | 0000002 | 0000002 |
| VBR-nRT.3 | 009 | DSB | 0000025000 | 1000000 | 0800000 | 0600000 | 0800000 | 0000002 | 0000002 |
| UBR.1 | 010 | DSB | 0000050000 | 1000000 | 0800000 | 0600000 | 0800000 | 0000004 | 0000004 |
| UBR.2 | 011 | DSB | 0000050000 | 1000000 | 0800000 | 0600000 | 0800000 | 0000004 | 0000004 |
| ABR | 012 | DSB | 0000050000 | 0200000 | 0800000 | 0600000 | 0800000 | 0000003 | 0000003 |
| CBR.2 | 013 | DSB | 0000002500 | 1000000 | 0800000 | 0600000 | 0800000 | 0000001 | 0000001 |
| CBR.3 | 014 | DSB | 0000002500 | 1000000 | 0800000 | 0600000 | 0800000 | 0000001 | 0000001 |
-----+

```

Display the Class of Service Thresholds for SCT 2.

**Note**

The two *random early discard* parameters (RED Factor and RED Prob) have no application in the current release of the product

```
MGX8850.1.AXSM.a > dsportsct cosThr 2
```

```
-----+
Service Class Template [00002] : COSB Threshold Parameters
-----+
```

COSB	COSB THRESH TBL IDX	MAX_CELL THRESH	EFCI	CLP_HI	EPD0	CLP_LO EPD1	RED FACTOR	RED PROB
0001	0000002	1000000	0200000	0800000	0600000	0800000	1000000	00000015
0002	0000003	1000000	0200000	0800000	0600000	0800000	1000000	00000015
0003	0000004	5000	1000000	0800000	0600000	0800000	1000000	00000015
0004	0000005	10000	1000000	0800000	0600000	0800000	1000000	00000015
0005	0000006	50000	1000000	0800000	0600000	0800000	1000000	00000015
0006	0000007	100000	1000000	0800000	0600000	0800000	1000000	00000015
0007	0000008	1000000	1000000	0800000	0600000	0800000	1000000	00000015
0008	0000009	1000000	1000000	0800000	0600000	0800000	1000000	00000015
0009	0000010	1000000	1000000	0800000	0600000	0800000	1000000	00000015
0010	0000011	1000000	1000000	0800000	0600000	0800000	1000000	00000015
0011	0000012	1000000	1000000	0800000	0600000	0800000	1000000	00000015
0012	0000013	1000000	1000000	0800000	0600000	0800000	1000000	00000015
0013	0000014	1000000	1000000	0800000	0600000	0800000	1000000	00000015
0014	0000015	1000000	1000000	0800000	0600000	0800000	1000000	00000015
0015	0000016	1000000	1000000	0800000	0600000	0800000	1000000	00000015
0016	0000017	10000	1000000	0800000	0600000	0800000	1000000	00000015

Example SCT 3

This example shows all parameters for SCT 3. Each display consists of one member of the SCT parameter group.

Display the bandwidth parameters for SCT 3.

```
MGX8850.9.AXSM.a > dsportsct bw 3
```

```
-----+
Service Class Template [3] : Bw and Policing Parameters
-----+
```

SERV-TYPE	PCR	SCR	MCR	MBS	CDVT	ICR
VSI-SIG	00001000	01000000	00000000	00000050	00250000	00000000
CBR.1	00001000	00000000	00000000	00000001	00250000	00000000
VBR-RT.1	00001000	01000000	00000000	00000050	00250000	00000000
VBR-RT.2	00001000	01000000	00000000	00000050	00250000	00000000
VBR-RT.3	00001000	01000000	00000000	00000050	00250000	00000000
VBR-nRT.1	00001000	01000000	00000000	00000050	00250000	00000000
VBR-nRT.2	00001000	01000000	00000000	00000050	00250000	00000000
VBR-nRT.3	00001000	01000000	00000000	00000050	00250000	00000000
UBR.1	00000010	00000000	00000000	00000001	00250000	00000000
UBR.2	00000010	00000000	00000000	00000001	00250000	00000000
ABR	00000010	00000000	01000000	00000001	00250000	00000000
CBR.2	00001000	00000000	00000000	00000001	00250000	00000000
CBR.3	00001000	00000000	00000000	00000001	00250000	00000000

Display the general parameters for SCT 3.

```
MGX8850.9.AXSM.a > dsportsct gen 3
```

```
-----+
Service Class Template [3] : General Parameters
-----+
```

SERV-TYPE	COSB_NUM	CAC_TYPE	UPC_ENB	CLP-SELEC	GCRA-1	GCRA-2	CI-CNTRL
VSI-SIG	00000016	B-CAC	DISABLED	00000002	DISCARD	DISCARD	DISABLED
CBR.1	00000003	B-CAC	DISABLED	00000003	DISCARD	DISCARD	DISABLED
VBR-RT.1	00000004	B-CAC	DISABLED	00000002	DISCARD	DISCARD	DISABLED
VBR-RT.2	00000004	B-CAC	DISABLED	00000001	DISCARD	DISCARD	DISABLED
VBR-RT.3	00000004	B-CAC	DISABLED	00000001	DISCARD	SET-CLP	DISABLED
VBR-nRT.1	00000005	B-CAC	DISABLED	00000002	DISCARD	DISCARD	DISABLED
VBR-nRT.2	00000005	B-CAC	DISABLED	00000001	DISCARD	DISCARD	DISABLED
VBR-nRT.3	00000005	B-CAC	DISABLED	00000001	DISCARD	SET-CLP	DISABLED
UBR.1	00000006	LCN_CAC	DISABLED	00000003	DISCARD	DISCARD	DISABLED
UBR.2	00000006	LCN_CAC	DISABLED	00000003	DSCD/SET-CLP	DISCARD	DISABLED
ABR	00000001	B-CAC	DISABLED	00000003	DISCARD	DISCARD	ENABLED
CBR.2	00000003	B-CAC	DISABLED	00000001	DISCARD	DISCARD	DISABLED
CBR.3	00000003	B-CAC	DISABLED	00000001	DISCARD	SET-CLP	DISABLED

Display the Class of Service Buffer parameters for SCT 3 Note the following:

- Min-Rate and Max-Rate do not apply in the current product.
- Excess-Priority is a scheme for distributing excess bandwidth. The lowest number is the highest priority for a connection to receive excess bandwidth. If two or more connections have equal priority, the excess bandwidth is equally distributed between them.
- Explicit Rate Stamping (ERS) applies to only ABR connections.
- Cell loss ratio (CLR) is currently hard-coded, so do not attempt to modify it through the Cisco WAN Manager application or the CLI commands.

```
MGX8850.9.AXSM.a > dsportsct cosb 3
```

```
-----+
Service Class Template [03] : COSB Parameters
-----+
```

COSB	MIN-RATE	MAX-RATE	MIN-PRIORITY	EXCESS-PRIORITY	ERS ENABLE	CLR
0001	00000000	00000100	000	002	DISABLE	10^-06
0002	00000000	00000100	000	002	DISABLE	10^-06
0003	00000000	00000100	000	000	DISABLE	10^-10
0004	00000000	00000100	000	001	DISABLE	10^-08
0005	00000000	00000100	000	001	DISABLE	10^-06
0006	00000000	00000100	000	002	DISABLE	10^-06
0007	00000000	00000100	000	002	DISABLE	10^-06
0008	00000000	00000100	000	002	DISABLE	10^-06
0009	00000000	00000100	000	002	DISABLE	10^-06
0010	00000000	00000100	000	002	DISABLE	10^-06
0011	00000000	00000100	000	002	DISABLE	10^-06
0012	00000000	00000100	000	002	DISABLE	10^-06
0013	00000000	00000100	000	002	DISABLE	10^-06
0014	00000000	00000100	000	002	DISABLE	10^-06
0015	00000000	00000100	000	002	DISABLE	10^-06
0016	00000000	00000100	000	000	DISABLE	10^-06

Display VC thresholds for SCT 3. Note the following:

The Scaling COSB value applies to congestion in a Class of Service Buffer: if a particular buffer becomes congested, this scaling factor determines the how quickly the rate at which cells enter the buffer is throttled back (until the buffer is no longer congested, at which time normal rates resume).

The Scaling Log-If is a scaling factor that applies to congestion on an entire port: when the whole port is congested, this factor determines the rate at which traffic is throttled back (until the port is no longer congested, at which time normal rates resume).

```
MGX8850.9.AXSM.a > dsportsct vcThr 3
```

```
-----+
Service Class Template [3] : VC Threshold Parameters
-----+
| SERV-TYPE | VC THRESH | PACKET | MAX_CELL | EFCI | CLP_HI | EPD0 | CLP_LO | SCALING | SCALING |
|           | TBL_IDX  | MODE   | THRESH   |      |        |      | EPD1   | COSB    | Log-If  |
-----+
| VSI-SIG   | 034      | DSB    | 000005000 | 1000000 | 0800000 | 0600000 | 0800000 | 0000002 | 0000002 |
| CBR.1     | 035      | DSB    | 000002500 | 1000000 | 0800000 | 0600000 | 0800000 | 0000001 | 0000001 |
| VBR-RT.1  | 036      | DSB    | 000005000 | 1000000 | 0800000 | 0600000 | 0800000 | 0000002 | 0000002 |
| VBR-RT.2  | 037      | DSB    | 000005000 | 1000000 | 0800000 | 0600000 | 0800000 | 0000002 | 0000002 |
| VBR-RT.3  | 038      | DSB    | 000005000 | 1000000 | 0800000 | 0600000 | 0800000 | 0000002 | 0000002 |
| VBR-nRT.1 | 039      | DSB    | 000002500 | 1000000 | 0800000 | 0600000 | 0800000 | 0000002 | 0000002 |
| VBR-nRT.2 | 040      | DSB    | 000002500 | 1000000 | 0800000 | 0600000 | 0800000 | 0000002 | 0000002 |
| VBR-nRT.3 | 041      | DSB    | 000002500 | 1000000 | 0800000 | 0600000 | 0800000 | 0000002 | 0000002 |
| UBR.1     | 042      | DSB    | 000005000 | 1000000 | 0800000 | 0600000 | 0800000 | 0000004 | 0000004 |
| UBR.2     | 043      | DSB    | 000005000 | 1000000 | 0800000 | 0600000 | 0800000 | 0000004 | 0000004 |
| ABR       | 044      | DSB    | 000005000 | 0200000 | 0800000 | 0600000 | 0800000 | 0000003 | 0000003 |
| CBR.2     | 045      | DSB    | 000002500 | 1000000 | 0800000 | 0600000 | 0800000 | 0000001 | 0000001 |
| CBR.3     | 046      | DSB    | 000002500 | 1000000 | 0800000 | 0600000 | 0800000 | 0000001 | 0000001 |
-----+

```

Display the Class of Service thresholds for SCT 3.



Note

The two *random early discard* parameters (RED Factor and RED Prob) have no application in the current release of the product.

```
MGX8850.9.AXSM.a > dsportsct cosThr 3
```

```
-----+
Service Class Template [00003] : COSB Threshold Parameters
-----+
| COSB | COSB THRESH | MAX_CELL | EFCI | CLP_HI | EPD0 | CLP_LO | RED | RED PROB |
|      | TBL_IDX    | THRESH   |      |        |      | EPD1   | FACTOR |          |
-----+
| 0001 | 0000018    | 1000000  | 0200000 | 0800000 | 0600000 | 0800000 | 1000000 | 00000015 |
| 0002 | 0000019    | 1000000  | 0200000 | 0800000 | 0600000 | 0800000 | 1000000 | 00000015 |
| 0003 | 0000020    | 5000     | 1000000 | 0800000 | 0600000 | 0800000 | 1000000 | 00000015 |
| 0004 | 0000021    | 1000     | 1000000 | 0800000 | 0600000 | 0800000 | 1000000 | 00000015 |
| 0005 | 0000022    | 5000     | 1000000 | 0800000 | 0600000 | 0800000 | 1000000 | 00000015 |
| 0006 | 0000023    | 100000   | 1000000 | 0800000 | 0600000 | 0800000 | 1000000 | 00000015 |
| 0007 | 0000024    | 100000   | 1000000 | 0800000 | 0600000 | 0800000 | 1000000 | 00000015 |
| 0008 | 0000025    | 100000   | 1000000 | 0800000 | 0600000 | 0800000 | 1000000 | 00000015 |
| 0009 | 0000026    | 100000   | 1000000 | 0800000 | 0600000 | 0800000 | 1000000 | 00000015 |
| 0010 | 0000027    | 100000   | 1000000 | 0800000 | 0600000 | 0800000 | 1000000 | 00000015 |
| 0011 | 0000028    | 100000   | 1000000 | 0800000 | 0600000 | 0800000 | 1000000 | 00000015 |
| 0012 | 0000029    | 100000   | 1000000 | 0800000 | 0600000 | 0800000 | 1000000 | 00000015 |
| 0013 | 0000030    | 100000   | 1000000 | 0800000 | 0600000 | 0800000 | 1000000 | 00000015 |
| 0014 | 0000031    | 100000   | 1000000 | 0800000 | 0600000 | 0800000 | 1000000 | 00000015 |
| 0015 | 0000032    | 100000   | 1000000 | 0800000 | 0600000 | 0800000 | 1000000 | 00000015 |
| 0016 | 0000033    | 1000     | 1000000 | 0800000 | 0600000 | 0800000 | 1000000 | 00000015 |
-----+

```

■ dspportsct

MGX8850.6.AXSME.a > **dsportsct cosb 1**

```

+-----+
|Service Class Template [03] : COSB Parameters|
+-----+
|COSB| MIN-RATE| MAX-RATE| EXCESS | CELL DISC | ERS | CLR|
|NUM |         |         | PRIORITY| ALARM      |     |    |
+-----+
| 1 |      0 | 1000000 |    1 | DISABLED | DISABLED | 6 |
| 2 |      6 | 1000000 |    1 | DISABLED | DISABLED | 6 |
| 3 |      6 | 1000000 |    1 | DISABLED | DISABLED | 6 |
| 4 |      6 |      100 |    1 | DISABLED | DISABLED | 6 |
| 5 |      0 | 100000 |    0 | DISABLED | DISABLED | 6 |
| 6 |      0 | 100000 |    1 | DISABLED | DISABLED | 6 |
| 7 |      6 | 100000 |    1 | DISABLED | DISABLED | 6 |
| 8 |      0 | 100000 |    0 | DISABLED | DISABLED | 6 |
| 9 |      6 |      100 |    1 | DISABLED | DISABLED | 6 |
|10 |      0 | 1000000 |    0 | DISABLED | DISABLED | 6 |
|11 |      1 | 1000000 |    1 | DISABLED | DISABLED | 6 |
|12 |      0 | 1000000 |    1 | DISABLED | DISABLED | 6 |
|13 |      0 | 100000 |    2 | DISABLED | DISABLED | 6 |
|14 |      0 | 100000 |    2 | DISABLED | DISABLED | 6 |
|15 |      6 | 1000000 |    1 | DISABLED | DISABLED | 6 |
|16 |      6 | 1000000 |    1 | DISABLED | DISABLED | 6 |
+-----+

```

dsppostresults

Display Power On Self-Test Results—PXM45, PXM1E

The **dsppostresults** command displays the results of power-on self tests that are run by the back-up boot code. The test results are stored, and you can subsequently view the results by using the **dsppostresults** command. See the display in the Example section for a list of the tests.

Syntax

```
dsppostresults
```

Syntax Description

This command takes no parameters.

Related Commands

None

Attributes

Log: no State: active, standby Privilege: ANYUSER

Example

Display the results of the power-on tests.

```
PXM1E_SJ.7.PXM.a > dsppostresults
```

```
Power On Self Test Results
```

Test Name	Result	Description
BRAM Checksum	PASS	
QE Ram	PASS	
CBC Ram	PASS	
Ethernet Reg	PASS	
PCI-IDE Reg	PASS	
Clock Mux	PASS	
Framer 1 Access	PASS	
Framer 2 Access	PASS	
Framer 3 Access	PASS	
Framer 4 Access	PASS	
ATLAS 1 Ram	PASS	
ATLAS 2 Ram	PASS	
Hard Disk Access	PASS	

dsppref

Display Preferred Route—PXM45, PXM1E

The **dsppref** command lets you displays details about a particular preferred route. The display shows the network elements (NEs) in the format specified when the route was created through the **addpref** command. For detailed information on the preferred routes feature, see the **addpref** description.

To see a list of all preferred routes, use the **dspprefs** command. Only nodes in the network node table can support preferred routes. If you do not know the nodes in the network node table, use the **dspnwnodes** command.

Syntax

```
dsppref <routeId>
```

Syntax Description

<i>routeId</i>	The route is an integer that identifies a route. To see a list of all preferred routes or routes associated with a particular switch, use the dspprefs command. Range: 1–65535 Default: none
----------------	---

Related Commands

addpref, **cnfpref**, **delpref**, **dspprefs**, **dspnwnode**, **dspnwnodes**

Attributes

Log: no State: active, standby Privilege: ANYUSER

Example

Display the following preferred routes: 150, 160, 170, 180, and 190.

```
PXM1E_SJ.7.PXM.a > dsppref 150
```

```
route identifier:150
Number of nodes:3
ne156:160:47.009181000000003071f80406.003071f80406.01/12345678
ne256:160:47.009181000000003071f80411.003071f80411.01/12345643
ne356:160:47.009181000000003071f80422.003071f80422.01/12345113
```

```
PXM1E_SJ.7.PXM.a > dsppref 160
```

```
route identifier:160
Number of nodes:3
ne1Fargo/1.2
ne2Chicago/2:1.3:3
ne3Denver/0
```



```
PXM1E_SJ.7.PXM.a > dsppref 170
```

```
route identifier:170  
Number of nodes:2  
ne156:160:47.009181000000003071f80406.003071f80406.01/1.2  
ne256:160:47.009181000000003071f80411.003071f80411.01/2:3.3
```

```
PXM1E_SJ.7.PXM.a > dsppref 180
```

```
route identifier:180  
Number of nodes:3  
ne1Fargo/12345678  
ne2Austin/12345643  
ne3ElPaso/0
```

```
PXM1E_SJ.7.PXM.a > dsppref 190
```

```
route identifier:190  
Number of nodes:2  
ne1 56:160:47.009181000000003071f80406.003071f80406.01/12345678  
ne2 Seattle/2:3.3
```

dspprefs

Display Preferred Routes—PXM45, PXM1E

The **dspprefs** command lets you list all preferred routes or narrow the scope through a variety of filters. For detailed information on the preferred routes feature, see the **addpref** description.

Syntax

```
dspprefs [ [ [-nodeid <nodeId>] | [-nodename <nodeName>] ]
[ [ [-pnportid <pnPortId>] | [-portid <portId>] ] ] |
[ [ [-dstnodeid <dstnodeId>] | [-dstnodename <dstnodeName>] ] ] ] }
```

Syntax Description

-nodeid	The 22-octet unique identifier of a PNNI node.
-nodename	A string of up to 32 IA5 characters.
-pnportid	The PNNI logical port ID is an integer in the range 0–4294967295.
-portid	The PNNI physical port ID depends on the PXM and chassis, as follows: <ul style="list-style-type: none"> • On a PXM45: <i>slot:subslot.port:subport</i> • On a PXM1E for UNI/NNI back card: <i>slot:subslot.port:subport</i>. On the UNI/NNI back card, the subslot is always 2, but the <i>slot</i> depends on the chassis, as follows: <ul style="list-style-type: none"> – In an MGX 8850 chassis, <i>slot</i> is always the logical slot 7. – In an MGX 8830 chassis, <i>slot</i> is always the logical slot 1. On a PXM1E for a narrowband service module (NBSM): <i>slot.port</i> .
-dstnodeid	A 22-octet unique node identifier for the destination node in the preferred route.
-dstnodename	A string of up to 32, case-sensitive IA5 characters to specify the destination node name in the preferred route.

Related Commands

addpref, **cnfpref**, **delpref**, **dsppref**, **addnwnode**, **dspnwnodes**, **dspnwnode**

Attributes

Log: no State: active, standby Privilege: ANYUSER

Examples

Display all preferred routes. The display shows a total of 5000 routes, so this display is truncated.

```
p2spvc4.7.PXM.a > dspprefs

total number of preferred routes = 5000

Route Identifier: 1
DestNE position : 4
ne1                p2spvc4/5:1.2:2
ne2                pnnises2/14.2
ne3                p2spvc3/10:2.1:32
ne4                amakjup156/0

Route Identifier: 2
DestNE position : 4
ne1                p2spvc4/5:1.2:2
ne2                pnnises2/14.2
ne3                p2spvc3/10:2.1:32
ne4                amakjup156/0

Route Identifier: 3
DestNE position : 4
ne1                p2spvc4/5:1.2:2
ne2                pnnises2/14.2
ne3                p2spvc3/10:2.1:32

Type <CR> to continue, Q<CR> to stop:
ne4                amakjup156/0

Route Identifier: 4
DestNE position : 4
ne1                p2spvc4/5:1.2:2
ne2                pnnises2/14.2
ne3                p2spvc3/10:2.1:32
ne4                amakjup156/0

Route Identifier: 5
DestNE position : 4
ne1                p2spvc4/5:1.2:2
ne2                pnnises2/14.2
ne3                p2spvc3/10:2.1:32
ne4                amakjup156/0

Route Identifier: 6
DestNE position : 4
ne1                p2spvc4/5:1.2:2
ne2                pnnises2/14.2
ne3                p2spvc3/10:2.1:32
ne4                amakjup156/0

Type <CR> to continue, Q<CR> to stop:
```

Display preferred routes that contain the following node ID:
56:160:47.009181000000003071f80411.003071f80411.01.

```
p2spvc14.7.PXM.a > dspprefs -nodeid 56:160:47.009181000000003071f80411.003071f80411.01
```

```
total number of preferred routes = 1

route identifier:150
Number of nodes:3
ne156:160:47.009181000000003071f80406.003071f80406.01/12345678
ne256:160:47.009181000000003071f80411.003071f80411.01/12345643
ne356:160:47.009181000000003071f80422.003071f80422.01/0
```

Display all preferred routes that include the node name p2spvc4. The display is truncated.

```
p2spvc4.7.PXM.a > dspprefs -nodename p2spvc4
```

```
total number of preferred routes = 5000
```

```
Route Identifier: 1
DestNE position : 4
ne1          p2spvc4/5:1.2:2
ne2          pnnises2/14.2
ne3          p2spvc3/10:2.1:32
ne4          amakjup156/0
```

```
Route Identifier: 2
DestNE position : 4
ne1          p2spvc4/5:1.2:2
ne2          pnnises2/14.2
ne3          p2spvc3/10:2.1:32
ne4          amakjup156/0
```

```
Route Identifier: 3
DestNE position : 4
ne1          p2spvc4/5:1.2:2
ne2          pnnises2/14.2
ne3          p2spvc3/10:2.1:32
```

```
Type <CR> to continue, Q<CR> to stop:
ne4          amakjup156/0
```

```
Route Identifier: 4
DestNE position : 4
ne1          p2spvc4/5:1.2:2
ne2          pnnises2/14.2
ne3          p2spvc3/10:2.1:32
ne4          amakjup156/0
```

```
Route Identifier: 5
DestNE position : 4
ne1          p2spvc4/5:1.2:2
ne2          pnnises2/14.2
ne3          p2spvc3/10:2.1:32
ne4          amakjup156/0
```

```
Route Identifier: 6
DestNE position : 4
ne1          p2spvc4/5:1.2:2
ne2          pnnises2/14.2
ne3          p2spvc3/10:2.1:32
ne4          amakjup156/0
```

```
Type <CR> to continue, Q<CR> to stop:
```

Display all preferred routes that include the node name Chicago and the physical port ID 2:1.3:3.

```
p2spvc14.7.PXM.a > dspprefs -nodename Chicago -portId 2:1.3:3
```

```
total number of preferred routes = 1
```

```
route identifier:160  
Number of nodes:3  
ne1Fargo/1.2  
ne2Chicago/2:1.3:3  
ne3Denver/0
```

Display the preferred routes that include the destination node with the following node ID:
56:160:47.009181000000003071f80422.003071f80422.01

```
p2spvc14.7.PXM.a > dspprefs -dstnodeid 56:160:47.009181000000003071f80422.003071f80422.01
```

```
total number of preferred routes = 1
```

```
route identifier:150  
Number of nodes:3  
ne156:160:47.009181000000003071f80406.003071f80406.01/12345678  
ne256:160:47.009181000000003071f80411.003071f80411.01/12345643  
ne356:160:47.009181000000003071f80422.003071f80422.01/0
```

Display the preferred routes that include the destination node with the node name ElPaso.

```
p2spvc14.7.PXM.a > dspprefs -dstnodename ElPaso
```

```
total number of preferred routes = 1
```

```
route identifier:190  
Number of nodes:3  
ne1Fargo/4:3.1:2  
ne2Chicago/1:2.3:4  
ne3ElPaso/0
```

dspprf

Display Profiler—PXM45, PXM1E

The **dspprf** command launches a facility called the profiler. It collects and displays statistics from resource usage. The resources include:

- Message queue
- Memory usage
- Memory chunks

Additionally, the **dspprfhist** command displays CPU usage.



Caution

The profiler is a facility intended for developers at Cisco Systems. Because of the possibly large CPU overhead involved with the profiler, using **dspprf** on an overloaded switch can have unpredictable and unacceptable consequences. For example, it could overwhelm a marginally functioning switch. For this reason, you should contact the TAC before using **dspprf** and never run it for exploratory or experimental reasons. For a safer look at system resources, use the Resource Monitoring commands (**cnfrmrsrc**, **dsprmalms**, **dsprmrsrc**, **dsprmrsrcs**, and **dsprminfo**) or the **dspprfhist** command.

Syntax

```
dspprf <t | i> <m | n | q | r>
```

Syntax Description

t i	This parameter determines the display option. For total display, type a “t.” For an interval display, type an “i.”
	Note In the current release, only the “t” option is supported.
m n q r	This parameter determines which resource to display.
	Note In the current release, only option m is supported.
	<ul style="list-style-type: none"> • m: Type an “m” for task-based memory usage. “Task” is also known as “process” in some other contexts, but they are interchangeable in this environment because the OS is not multi-threaded. • n: Memory chunk. <i>In the current release, this option is not supported.</i> Instead, use the following commands: dsprmrsrcs or dsprmrsrc <resource ID>. • q: Message queue profiler information. <i>In the current release, this option is not supported.</i> Instead, use the following commands: dsprmsgqs or dsprmsgq <Message Queue ID> <Level> • r: System services interface SSI memory information. <i>In the current release, this option is not supported.</i> Instead, use the following commands: dsprmrsrcs or dsprmrsrc <resource ID>.

Related Commands

dspprfhist, **cnfrmrsrc**, **dsprmalms**, **dsprmrsrc**, **dsprmrsrcs**, **dsprminfo**

Attributes

Log: no State: active, standby Privilege: ANYUSER

Examples

Display task-based memory usage. The display is truncated.

The display for task-based memory usage has the following headings:

- Block (“Blk”): The block column shows the number of successfully allocated memory blocks. This number includes all the system services interface (SSI) memory partitions, such as static partition, dynamic partition, SNMP partition, and statistics partition (if available). It excludes the memory blocks directly allocated from the OS memory partition.
- Size: Sum of allocated memory.
- Maximum block (“MaxBlk”): This number is the high water mark of allocated memory *blocks*. It indicates the highest level of the memory blocks’ *utilization* up to the current moment.
- Maximum size (“MaxSz”): This number is the high water mark of allocated memory. It indicates the maximum allocated memory up to the current moment.

```
M8830_SF.2.PXM.a > dspprf t m
          Blk      Size      MaxBlk      MaxSz
UNKOWN          0          0          0          0
tRootTask      39 22114112      167 22129472
tLOGD           0          0          0          0
tSAR            0          0          0          0
tSCM           99   13440      100   13776
tRPC            1          96          1          96
tSarDisp        0          0          0          0
tQe0Task        0          0          0          0
tQe1Task        0          0          0          0
tChunkMon       0          0          0          0
ctc             3   9040          3   9040
tExcTask        0          0          0          0
tLogTask        0          0          0          0
tRlogind        0          0          0          0
tWdbTask        0          0          0          0
tNetTask        0          0          0          0
FtpdTask        0          0          0          0
tPortmapd       0          0          0          0
ShelfMgr       142   87536      142   90496
IPC Ctl         0          0          0          0
tSyncRamDb      1   13024          1   13024
IPC_NameSvr     58   60448          58   60448
basicCli        0          0          0          0
basicIn         4   4112          7   5760
tmon            0          0          1   208
shmDiskHdlr     0          0          1   3984
tShmPing        0          0          0          0
dbClnt         511 103808      530 115056
dbSvr           90  556080      90  556080
FileAccSrv      0          0          1   8256
HwMonitor       10   2112          13  2400
dbSvrVal        0          0          0          0
dbSvrIO         0          0          0          0
dbSvrSync       352 1138064      364 1164512
dbSvrVerf       0          0          0          0
tSyserrd        2   192          3   288
tCliIOtimer     1    96          2   192
```

Autocard	4	560	5	656
NwClockMgr	0	0	0	0
SysDiag	0	0	0	0
tRed	1	96	1	96
lsmProxy	0	0	0	0
tsctfmgr	0	0	1	15072
tLMServer	2	384	3	8224
tLMSubTask	0	0	0	0
rmonTask	0	0	0	0
FTM	67	5904	67	5904
StatUpldMgr	601	67328	602	67504
StatFileMgr	84	7040	84	7040
emRoot	12	2788864	13	2789104
PnProot	4	161936	8	162416
snmpRat	1	208	1	208
ilmiRat	1	176	2	256
cliRat	1	208	2	288
lmiRootTask	1	1024064	2	1026064
ipconn	0	0	0	0
TrapRat	1	176	2	256
cmRat	1	256	2	336
PxmleOnline	0	0	0	0
ProxyRat	1	128	1	128
CutRat	1	240	2	320
FMRoot	0	0	0	0
namTask	1	96	3	352
SERAT	1	128	1	128
tRMM	2244	316048	2246	755856
tRVT	6	1376	7	49440
tSrbm	0	0	0	0
tSrme	0	0	0	0
tSrmct	0	0	1	224
SrmTopBayOn	0	0	0	0
tBertd	0	0	0	0
tCrdmp	0	0	0	0
CCMA_Task	0	0	0	0
snmpDataSvr	0	0	0	0
tIpcZoneMgr	0	0	0	0
tIpcTimer	0	0	0	0
tIpcDeferre	0	0	0	0
tIpcServer	12	4448	13	4544
tIpcTimer64	0	0	0	0
tRvtSnmp	0	0	0	0
tRpmRsncMsg	0	0	0	0
hw_timer_Ta	0	0	0	0
hw_10msTime	0	0	0	0
tDispatch	0	0	0	0
tSrmeAPSPPro	0	0	0	0
pnPnni	92	3405280	95	3405824
dcTask0	0	0	0	0
sfpMonTask0	0	0	0	0
csmiTask	1	96	2	192
OnlineSubTa	0	0	0	0
smgr	0	0	0	0

Type <CR> to continue, Q<CR> to stop:
....

dspprfhist

Display Profiler History—PXM45, PXM1E

The **dspprfhist** command displays CPU usage. The information consists of a percent of CPU time used by individual tasks. The information appears in “buckets” (see Example). You can specify the maximum number of “CPU utilization information” buckets that are displayed. Each bucket reflects the overall CPU utilization of the tasks in a five-second polling interval.



Note

This command applies primarily to internal Cisco developers.

Syntax

dspprfhist [*buckets*]

Syntax Description

buckets Optional number of buckets to display. If you do not specify the number of buckets, the command displays a maximum of 10 buckets.

Note Although the on-line help for this command refers to this option as “intervals,” the option is “buckets.”

- Range: 1–120
- Default: 10

Related Commands

dspprf, **cnfrmrsrc**, **dsprmalms**, **dsprmrsrc**, **dsprmrsrcs**, **dsprminfo**

Attributes

Log: no State: active, standby Privilege: ANYUSER

Example

Display the CPU usage history. The display is truncated after to screen iterations because the switch is idle, so the screen contents are redundant.

**Note**

The total percent of CPU usage does not necessarily equal 100 because only the three busiest tasks are displayed.

```
Unknown.7.PXM.a > dspprfhist
CURRENT TIME      08:48:54
Sample #         0
08:48:15 (From) -08:48:35 (To)
TASK              TaskId          %
-----
INTERRUPT         -             0.0000
KERNEL            -             0.0000
IDLE              -             99.0000
UNKOWN            -             0.0000
tChunkMon        16             0.0000
tNetTask         21             0.0000

Sample #        -1

08:47:55 (From) -08:48:15 (To)
TASK              TaskId          %
-----
INTERRUPT         -             0.0000
KERNEL            -             0.0000
IDLE              -             99.0000
UNKOWN            -             0.0000
tChunkMon        16             0.0000

Sample #        -2

.
.
```

dspprfx

Display Prefix—PXM45, PXM1E

Display the ILMI address prefixes for a port.

Syntax

```
dspprfx <portid>
```

Syntax Description

portid The format of the PNNI physical port identifier can vary, as follows:

- On a PXM45: *slot:subslot.port:subport*
- On a PXM1E for UNI/NNI back card: *slot:subslot.port:subport*. On the UNI/NNI back card, the subslot is always 2, but the *slot* depends on the chassis, as follows:
 - In an MGX 8850 chassis, *slot* is always the logical slot 7.
 - In an MGX 8830 chassis, *slot* is always the logical slot 1.
- On a PXM1E for a narrowband service module (NBSM): *slot.port*.

For more details, see the section, “PNNI Format,” in [Chapter 1, “Introduction.”](#)

Related Commands

`addprfx`, `delprfx`

Attributes

Log: no State: active, standby Privilege: ANYUSER

Example

Display all ILMI address prefixes for port 4:1.1:11.

```
SanJose.7.PXM.a > dspprfx 4:1.1:11
ILMI Configured Port Prefix(es):
47.0091.8100.0000.0000.0ca7.9e01
 88.8888.8888.0000.0000.0000.0000
SanJose.7.PXM.a >
```

dsppri-routing

Display Priority Routing—PXM45, PXM1E

The **dsppri-routing** command displays the node-level configuration for the bandwidth and timer values that apply to the Priority Routing Feature. (The actual priority of an SPVC or SPVP is assigned through the **addcon** or **cnfcon** command.) For detailed information on the Priority Routing feature, see the description of the **cnfpri-routing** command.

Syntax

dsppri-routing

Syntax Description

No parameters

Related Commands

cnfpri-routing, **dspecon**, **dspecons**, **dsppncon**, **dsppncons**, **addcon**, **cnfcon**, **cnfpnportsig**, **dsppnportsig**, **cnfpnportecac**, **dsppnportecac**, **dsppnport**

Attributes

Log: yes State: active Privilege: ANYUSER

Example

Display the node-level configuration for the Priority Routing feature. It appears that no configuration has occurred because the values are the defaults.

```
M8850_LA.8.PXM.a > dsppri-routing
```

```
Priority Routing Configuration
```

```
-----
```

```
Number of bandwidth groups: 20
```

```
Size of first bandwidth group (in cps): 5000
```

```
Increment between bandwidth groups (in cps): 1000
```

```
Routing event buffer size (in 0.1-seconds): 0
```

```
Node startup routing delay (in 0.1-seconds): 0
```

```
M8850_LA.8.PXM.a >
```

dsppswdreset

Display Password Reset—PXM45, PXM1E

The **dsppswdreset** command lets you see whether the series of keys is enabled that resets the node to the Cisco default password. See the **cnfpasswdreset** description.

Syntax

```
dsppswdreset
```

Syntax Description

This command takes no parameters.

Related Commands

```
cnfpasswdreset
```

Attributes

Log: no State: active Privilege: ANYUSER

Example

Check the status of the sequence of keys that resets the node password to the Cisco default.

```
pop20one.7.PXM.a > dsppswdreset  
Password Reset feature currently enabled
```

dsppvcif

Display PVC Interface—PXM45, PXM1E

Display details about the PVC interface for IP connectivity. The output shows the:

- Interface type on which the PVC connections exists. Possible types are:
 - ATM (atm0 in the output)
 - Ethernet (InPcio0 in the output)
 - SLIP interface (sl0 in the output)
- Alarms, if any
- The operational state
- Flags specified for the PVC support (through the **pvcifconfig** command)
- The number of logical connection numbers (LCNs) in the receive and transmit direction)
- Numbers in input and output frames

Syntax

dsppvcif

Syntax Description

This command takes no parameters.

Related Commands

dspipif, **pvcifconfig**, **ipifconfig**, **dspipifcache**

Attributes

Log: no State: active, standby, init Privilege: ANYUSER

Example

Display the current ATM interface state.

```

oriooses5.1.PXM.a > dsppvcif
oriooses5                               System Rev: 01.00   Aug. 10, 2000 18:36:01 GMT
SES-CNTL                                 Node Alarm: NONE
IP CONNECTIVITY PVC CACHE
-----
atm (unit number 0):
  Feeder VPI.VCI: 3.8
  Flags:                (0x38) VCMUX, PVC, FEEDER
  State:                (0x1) UP
  RxLCN:                722           TxLCN:                32776
  LCNindex:             0           Feeder Name:         svcbpx16
  Input Frames:         10           Output Frames:        10
  Input Errors:         0           Output Errors:         0

```

dspqosdefault

Display Quality of Service Defaults—PXM45, PXM1E

The **dspqosdefault** command shows whether defaults exist for individual quality of service (QoS) parameters and the values for any existing defaults.

Syntax

```
dspqosdefault
```

Syntax Description

This command takes no parameters.

Related Commands

clrqosdefault, cnfqosdefault

Attributes

Log: yes State: active, standby Privilege: ANYUSER

Example

Display the enables and settings for default QoS values on the switch.

```
Unknown.8.PXM.a > dspqosdefault
```

```
Service Category = cbr                               Qos Default Enable = no
MaxCTD =                Not Provisioned             ppCDV =                Not Provisioned
MaxClrClp0 =            Not Provisioned             MaxClrClp01 =          Not Provisioned

Service Category = rt-vbr                             Qos Default Enable = no
MaxCTD =                Not Provisioned             ppCDV =                Not Provisioned
MaxClrClp0 =            Not Provisioned             MaxClrClp01 =          Not Provisioned

Service Category = nrt-vbr                            Qos Default Enable = no
MaxCTD =                Not Provisioned             ppCDV =                Not Provisioned
MaxClrClp0 =            Not Provisioned             MaxClrClp01 =          Not Provisioned

Unknown.8.PXM.a >
```

dspred

Display Redundancy—PXM45, PXM1E

The **dspred** command displays the configuration for card-level redundancy in the slots where this redundancy exists.



Note

1:N redundancy requires a Service Resource Module (SRME or SRM-3T3) in the switch.

Syntax

dspred

Related Commands

addred, delred, switchredcd

Attributes

Log: no State: active Privilege: ANYUSER

Example (PXM45)

Display redundancy on the switch. This example comes from a MGX 8850 node with a PXM45.

```
M8850_LA.8.PXM.a > dspred
M8850_LA                               System Rev: 03.00   Apr. 25, 2002 17:11:39 PST
MGX8850                               Node Alarm: CRITICAL
Logical Primary Secondary Card Redundancy
Slot Slot Card Slot Red Type Type
      State State
-----
  1   1 Active   2   Standby AXSM      NO REDUN
  7   7 Standby  8   Active  PXM45    NO REDUN

M8850_LA.8.PXM.a >
```

Example (PXM1E)

Display redundancy on the switch. This example comes from an MGX 8850 node with a PXM1E.

```
Unknown.7.PXM.a > dspred
Unknown                               System Rev: 03.00   Apr. 25, 2002 16:41:16 GMT
MGX8850                               Node Alarm: MAJOR
Logical Primary Secondary Card Redundancy
Slot Slot Card Slot Red Type Type
      State State
-----
  7   7 Active   8   Empty Resvd PXM1E    1:1
 15  15 Empty  16   Empty      SRM      1:1
 31  31 Active  32   Empty      SRME-1OC3 1:1

Unknown.7.PXM.a >
```


dsprevs

Display Revisions—PXM45, PXM1E

The **dsprevs** command shows the current versions of firmware for all slots.

The optional parameter for this command lets you see the status of a revision change. Slight variations exist in the display with and without the optional parameter:

- Without the parameter, **dsprevs** shows the versions of boot firmware as well as primary and secondary runtime firmware.
- With the optional **-status** parameter (or just **-s**), **dsprevs** shows the current runtime firmware version, the primary and secondary runtime firmware versions, and the status of the revision change—but not the boot firmware version.

The **dsprevs** command helps you observe the progress of an upgrade. When a revision change is in progress, the Rev Change Status column shows the command for the active process—**loadrev** for example—for the affected slot and whether the process is an upgrade (“U”) or a downgrade (“D”). Usually, a revision change is an upgrade rather than a downgrade. The Rev Change Status column also shows when the revision command is in progress and subsequently when it is done.

The **dspcds** command shows the status of each card and its slot configuration in the switch. During an upgrade, the card eventually is reset. In a graceful upgrade, the **runrev** command resets the command. In the case of a forced revision change, the **setrev** command resets the card.

For information on graceful firmware upgrades, see **loadrev**, **runrev**, **commitrev**, and **dspversion**.



Note

The portion of the display that shows slots 17–32 is reserved for future use.

Syntax

```
dsprevs [-status]
```

Syntax Description

-status	Cause the display to show the status of a firmware revision change.
----------------	---

Related Commands

runrev, **loadrev**, **dspversion**, **dspcd**, **dspcds**



Note

The **dspcd** and **dspcds** commands show a firmware revision change in progress with a U (for upgrade) or D (for downgrade).

Attributes

Log: no

State: active

Privilege: ANYUSER

Examples

Display firmware versions and include status of any firmware upgrades. Note that the display shows the logical slot number 7 for physical slot 8. The display shows that no firmware **upgrades** are in progress. If an upgrade were in progress on slots 7 and 8 and the present command were **loadrev**, the Rev Change Status column would show "Loadrev in prog-U."

```
M8850_NY.7.PXM.a > dsprevs -s
M8850_NY                               System Rev: 02.01   Oct. 21, 2001 19:04:09 PST
MGX8850                               Node Alarm: CRITICAL
Phy. Log. Cur Sw                       Prim Sw           Sec Sw           Rev Chg
Slot Slot Revision                     Revision         Revision         Status
---- ---- -
01  01  2.1(70.58)P2   2.1(70.58)P2     2.1(70.58)P2     ---
02  02  ---           ---              ---              ---
03  03  2.1(70.58)P2   2.1(70.58)P2     2.1(70.58)P2     ---
04  04  ---           ---              ---              ---
05  05  2.1(70.58)P2   2.1(70.58)P2     2.1(70.58)P2     ---
06  06  2.1(70.58)P2   2.1(70.58)P2     2.1(70.58)P2     ---
07  07  2.1(70.58)A    2.1(70.58)A      2.1(70.58)A      ---
08  07  2.1(70.58)A    2.1(70.58)A      2.1(70.58)A      ---
09  09  ---           ---              ---              ---
10  10  ---           ---              ---              ---
11  11  ---           ---              ---              ---
12  12  ---           ---              ---              ---
13  13  ---           ---              ---              ---
14  14  ---           ---              ---              ---
```

```
M8850_NY.7.PXM.a >
```

Display revisions.

```
M8850_NY                               System Rev: 02.01   Oct. 21, 2001 19:05:23 PST
MGX8850                               Node Alarm: CRITICAL
Physical Logical  Inserted   Cur Sw          Boot FW
Slot     Slot   Card       Revision        Revision
-----
01       01    AXSM_4OC12 2.1(70.58)P2   2.1(70.58)A
02       02    ---        ---             ---
03       03    AXSM_4OC12 2.1(70.58)P2   2.1(70.58)A
04       04    ---        ---             ---
05       05    AXSME_2OC12 2.1(70.58)P2   2.1(70.58)A
06       06    AXSM_16OC3_B 2.1(70.58)P2   2.1(70.58)A
07       07    PXM45      2.1(70.58)A    2.1(70.58)A
08       07    PXM45      2.1(70.58)A    2.1(70.58)A
09       09    RPM_PR     ---            ---
10       10    ---        ---            ---
11       11    ---        ---            ---
12       12    ---        ---            ---
13       13    ---        ---            ---
14       14    ---        ---            ---
```

```
M8850_NY.7.PXM.a >
```

The next examples show an RPM-XF. For the first example, display revisions without the parameter.

```
Unknown.8.PXM.a > dsprevs
Unknown                System Rev:03.00   Jan. 29, 2002 16:49:49 GMT
MGX8850                Node Alarm:MAJOR
Phy. Log. Inserted    Cur Sw          Boot FW
Slot Slot Card        Revision        Revision
-----
01 01 ---              ---            ---
02 02 ---              ---            ---
03 03 ---              ---            ---
04 04 ---              ---            ---
05 06 ---              ---            ---
06 06 RPM_XF          IOSver         IOSver
    Cur SW Rev: 12.2(20020125:024232)
    Boot FW Rev:12.2(20020125:024232)
07 07 PXM45B          3.0(0.0)D     3.0(0.100)A
08 07 PXM45B          3.0(0.0)D     3.0(0.100)A
09 09 ---              ---            ---
10 10 AXSM_16OC3      3.0(0.160)A   3.0(0.160)A
11 11 ---              ---            ---
12 12 RPM_PR          12.2(8)YP     12.2(8)YP
13 13 RPM_XF          12.2(8)YP     12.2(8)YP
14 14 ---              ---            ---
15 15 ---              ---            ---
16 16 ---              ---            ---
17 17 ---              ---            ---
18 18 ---              ---            ---
19 19 ---              ---            ---
20 20 ---              ---            ---
21 21 ---              ---            ---
22 22 ---              ---            ---
23 23 ---              ---            ---
24 24 ---              ---            ---
25 25 ---              ---            ---
26 26 ---              ---            ---
27 27 ---              ---            ---
28 28 ---              ---            ---
29 29 ---              ---            ---
30 30 ---              ---            ---
31 31 ---              ---            ---
32 32 ---              ---            ---
```

```

Unknown.8.PXM.a > dsprevs -s
Unknown          System Rev:03.00   Jan. 29, 2002 17:12:41 GMT
MGX8850          Node Alarm:MAJOR
Phy. Log. Cur Sw      Prim Sw      Sec Sw      Rev Chg
Slot Slot  Revision    Revision    Revision    Status
-----
01  01  ---          ---          ---          ---
02  02  ---          ---          ---          ---
03  03  ---          ---          ---          ---
04  04  ---          ---          ---          ---
05  06  ---          ---          ---          ---
06  06  IOSver      IOSver      IOSver      ---
      Cur SW Rev: 12.2(20020125:024232)
      Prim SW Rev:---
      Sec SW Rev: ---
07  07  3.0(0.0)D   3.0(0.0)D   3.0(0.0)D   ---
08  07  3.0(0.0)D   3.0(0.0)D   3.0(0.0)D   ---
09  09  ---          ---          ---          ---
10  10  3.0(0.160)A 3.0(0.160)A 3.0(0.160)A ---
11  11  ---          ---          ---          ---
12  12  12.2(8)YP   ---          ---          ---
13  13  12.2(8)YP   ---          ---          ---
14  14  ---          ---          ---          ---
15  15  ---          ---          ---          ---
16  16  ---          ---          ---          ---
17  17  ---          ---          ---          ---
18  18  ---          ---          ---          ---
19  19  ---          ---          ---          ---
20  20  ---          ---          ---          ---
21  21  ---          ---          ---          ---
22  22  ---          ---          ---          ---
23  23  ---          ---          ---          ---
24  24  ---          ---          ---          ---
25  25  ---          ---          ---          ---
26  26  ---          ---          ---          ---
27  27  ---          ---          ---          ---
28  28  ---          ---          ---          ---
29  29  ---          ---          ---          ---
30  30  ---          ---          ---          ---
31  31  ---          ---          ---          ---
32  32  ---          ---          ---          ---

```

dsprmalms

Display Resource Monitoring Alarms—PXM45, PXM1E

The **dsprmalms** command displays alarms related to resource monitoring. See the **cnfrmrsrc** description for details about the resource monitoring feature.

Syntax

```
dsprmalms
```

Syntax Description

This command takes no parameters.

Related Commands

cnfrmrsrc, **dsprmrscs**, **dsprmrsrc**, **dsprminfo**

Attributes

Log: no State: active, standby, init Privilege: ANYUSER

Example

Display the current resource monitoring information.

```
M8830_SF.2.PXM.a > dsprmalms
=====[Resource Monitoring Alarm ]=====
ID      Name                               Critical:   Major:     Minor:
-----
0       SSI Static Memory                    0          0          0
1       SSI dynamic Memory                   0          0          0
2       SSI stats Memory                     0          0          0
3       SSI snmp Memory                      0          0          0
4       SSI IPC Small Buffer                  0          0          0
5       SSI IPC Medium Buffer                 0          0          0
6       SSI IPC Large Buffer                  0          0          0
7       SSI IPC Huge Buffer                   0          0          0
8       SSI IPC mblk Buffer                   0          0          0
9       Hard Disk Space - C:                  0          0          0
10      Hard Disk Space - D:                  0          0          0
11      Hard Disk Space - E:                  0          0          0
12      Hard Disk Space - F:                  0          0          0
13      CPU Peak Utilization                  0          0          0
14      System Memory                        0          0          0
15      SSI Timer                             0          0          0
16      SSI File Descriptor                  0          0          0
17      VxWorks File Descriptor               0          0          0
-----
TOTAL:   Critical: 0      Major: 0      Minor: 0

M8830_SF.2.PXM.a >
```

dsprinfo

Display Resource Monitoring Information—PXM45, PXM1E

The **dsprinfo** command displays information about the *system monitoring feature*. Note that this display does not show the monitored resources but rather the activity of the resource monitor. See the example for the **dsprinfo** display contents.

For the resources that are monitored and the configuration of the monitoring activities, see the descriptions of the following commands: **dsprmrscs**, **dsprmrsrc**, **dsprmalms**, and **cnfrmrsrc**.

Syntax

```
dsprinfo
```

Syntax Description

This command takes no parameters.

Related Commands

cnfrmrsrc, **dsprmrscs**, **dsprmrsrc**, **dsprmalms**

Attributes

Log: no State: active, standby, init Privilege: ANYUSER

Example

Display the current resource monitoring information.

```
M8830_SF.2.PXM.a > dsprinfo
===== [Task Info] =====
numOfRsrcs   : 18          Attempt           : 0
actInterval  : 1           maxTrapResend    : 10
trapInterval : 300        alarmCriCnt      : 0
alarmMajCnt  : 0          alarmMinCnt      : 0

===== [statistics] =====
pollTotalCnt      : 3054286   pollFailCnt      : 0
pollOkCnt         : 3054286   pollNumFuncCnt   : 0
pollOk2LowCnt     : 0         pollOk2MedCnt    : 0
pollMed2LowCnt    : 0         pollLow2OkCnt    : 0
pollMed2OkCnt     : 0         pollTimerTimeoutcnt : 3054289
pollTimeoutRsrcNullCnt : 0     pollTimerSucceedScheduleCnt: 3054289
pollTimerFailScheduleCnt: 0     pollTimerUnexpectedCnt : 0

alarmUpdateTotalCnt : 0         alarmUpdateSucceedCnt : 0
alarmUpdateFailCnt  : 0
trapTimerTimeoutCnt : 0         trapTimerUnexpected   : 0
trapTimerSuccScheduleCnt: 0     trapTimerFailScheduleCnt : 0
actSucceedCnt       : 3983837   actFailCnt        : 0
actTimerTimeoutCnt  : 3983853   actTimerUnexpectedCnt : 0
actTimerOkScheduleCnt : 3983853   actTimerFailScheduleCnt : 0
unknownTimerCnt     : 0         comEpWaitBreak      : 0

M8830_SF.2.PXM.a >
```

dsprmrsrc

Display Resource Monitor by Resource—PXM45, PXM1E

The **dsprmrsrc** command displays details about each system resource that is being monitored. The Example section shows the categories of information monitored for each resource. You can configure the *monitoring* of each resource (not the resource itself) by using the **cnfrmrsrc** command. You can view high-level information about all monitored resources by using the **dsprmrsrcs** command.

Syntax

```
dsprmrsrc <rsrId>
```

Syntax Description

rsrId The range for resource identifiers varies with the processor card, as follows:

- PXM45: 0–16
- PXM1E: 0–17

Related Commands

cnfrmrsrc, **dsprmrsrcs**, **dsprminfo**, **dsprmalms**

Attributes

Log: no State: active, standby, init Privilege: ANYUSER

Examples

Display each monitored resource. Note that this series of screens is taken from a PXM1E. In the current release, the PXM1E has one more monitored resource than the PXM45: SSI statistical memory.

The series starts with SSI static memory.

```
M8830_SF.2.PXM.a > dsprmrsrc 0
=====
name      : SSI Static Memory      state      : OK
Maximum size      : 300974080           Cur size : 245114656(Byte)
ignoreMed         : NO                  LowWaterMark : 245114656
Threshold Type    : value                poll interval: 30
Low threshold value : 28893480           Medium threshold value: 31301270
High threshold value : 33709060          Low threshold percent : 60
Medium threshold percent: 70             High threshold percent: 80

=====
Send      Alarm
Trap      Critical Major  Minor
-----
Low Action: yes      no      yes      no
Med Action: yes      no      no      yes
Ok Action : yes      no      yes      no
```

```

=====[Statistics]=====
total poll: 132074      failed poll: 0
ok to low : 0          ok to med  : 0
med to low: 0          low to ok  : 0
med to ok : 0
=====[Others]=====
Largest Free Size: 245114608
Critical priority alloc: 521          Critical alloc fail: 0
High priority alloc: 1267            High alloc fail: 0
Low priority alloc: 857              Low alloc fail: 0

```

Display SSI dynamic memory.

```

M8830_SF.2.PXM.a > dspmrsrc 1
=====[Resource Infomation]=====
name      : SSI dynamic Memory      state      : OK
Maximum size      : 41041920          Cur size : 38134320(Byte)
ignoreMed        : NO                LowWaterMark : 38132576
Threshold Type   : value              poll interval: 30
Low threshold value : 7387440        Medium threshold value: 8003060
High threshold value : 8618680        Low threshold percent : 120
Medium threshold percent: 130          High threshold percent: 140

```

```

=====[Action Info]=====
          Send          Alarm
          Trap          Critical Major Minor
-----
Low Action: yes          no          yes          no
Med Action: yes          no          no           yes
Ok Action : yes          no          yes          no

```

```

=====[Statistics]=====
total poll: 132074      failed poll: 0
ok to low : 0          ok to med  : 0
med to low: 0          low to ok  : 0
med to ok : 0
=====[Others]=====
Largest Free Size: 38130288
Critical priority alloc: 486          Critical alloc fail: 0
High priority alloc: 6673458          High alloc fail: 0
Low priority alloc: 555865            Low alloc fail: 0

```

Display SSI dynamic statistical memory. This resource is visible on the PXM1E only.

```

M8830_SF.2.PXM.a > dspmrsrc 2
=====[Resource Infomation]=====
name      : SSI stats Memory      state      : OK
Maximum size      : 27361280          Cur size : 27361280(Byte)
ignoreMed        : NO                LowWaterMark : 27361280
Threshold Type   : value              poll interval: 30
Low threshold value : 328320          Medium threshold value: 355680
High threshold value : 383040          Low threshold percent : 12
Medium threshold percent: 13          High threshold percent: 14

```

```

=====[Action Info]=====
          Send          Alarm
          Trap          Critical Major Minor
-----
Low Action: yes          no          yes          no
Med Action: yes          no          no           yes
Ok Action : yes          no          yes          no

```



```

=====[Statistics]=====
total poll: 132074      failed poll: 0
ok to low : 0          ok to med  : 0
med to low: 0          low to ok  : 0
med to ok : 0
=====[Others]=====
Largest Free Size: 15605328
Critical priority alloc: 0          Critical alloc fail: 0
High priority alloc: 0             High alloc fail: 0
Low priority alloc: 0             Low alloc fail: 0

```

Display SSI SNMP memory.

```

M8830_SF.2.PXM.a > dsprmrsrc 3
=====[Resource Infomation]=====
name      : SSI snmp Memory      state      : OK
Maximum size      : 27361280          Cur size : 24710256(Byte)
ignoreMed         : NO                LowWaterMark : 24710256
Threshold Type    : value            poll interval: 30
Low threshold value : 1641600        Medium threshold value: 1778400
  High threshold value : 1915200      Low threshold percent : 60
Medium threshold percent: 70          High threshold percent: 80

```

```

=====[Action Info]=====
          Send          Alarm
          Trap          Critical Major Minor
-----
Low Action: yes          no          yes          no
Med Action: yes          no          no          yes
Ok Action : yes          no          yes          no

```

```

=====[Statistics]=====
total poll: 132074      failed poll: 0
ok to low : 0          ok to med  : 0
med to low: 0          low to ok  : 0
med to ok : 0
=====[Others]=====
Largest Free Size: 24494256
Critical priority alloc: 0          Critical alloc fail: 0
High priority alloc: 1364264405    High alloc fail: 0
Low priority alloc: 0             Low alloc fail: 0

```

Display SSI IPC small buffer.

```

M8830_SF.2.PXM.a > dsprmrsrc 4
=====[Resource Infomation]=====
name      : SSI IPC Small Buffer state      : OK
Maximum size      : 7500          Cur size : 7496(Buf)
ignoreMed         : NO                LowWaterMark : 7476
Threshold Type    : value            poll interval: 30
Low threshold value : 2250          Medium threshold value: 2437
  High threshold value : 2625        Low threshold percent : 300
Medium threshold percent: 320        High threshold percent: 350

```

```

=====[Action Info]=====
          Send          Alarm
          Trap          Critical Major Minor
-----
Low Action: yes          no          yes          no
Med Action: yes          no          no          yes
Ok Action : yes          no          yes          no

```

```

=====[Statistics]=====
total poll: 132074      failed poll: 0
ok to low : 0          ok to med  : 0
med to low: 0          low to ok  : 0
med to ok : 0
=====[Others]=====
alloc ok: 141797798    alloc fail: 0
free ok: 141797794    free fail: 0
corrupts: 0

```

Display SSI IPC medium buffer.

```

M8830_SF.2.PXM.a > dsprmrsrc 5
=====[Resource Infomation]=====
name      : SSI IPC Medium Buffer state   : OK
Maximum size      : 3000                  Cur size : 3000(Buf)
ignoreMed         : NO                    LowWaterMark : 2991
Threshold Type    : value                  poll interval: 30
Low threshold value      : 900            Medium threshold value: 975
High threshold value    : 1050           Low threshold percent : 300
Medium threshold percent: 320           High threshold percent: 350

```

```

=====[Action Info]=====
          Send          Alarm
          Trap          Critical Major Minor
-----
Low Action: yes          no          yes          no
Med Action: yes          no          no          yes
Ok Action : yes          no          yes          no

```

```

=====[Statistics]=====
total poll: 132074      failed poll: 0
ok to low : 0          ok to med  : 0
med to low: 0          low to ok  : 0
med to ok : 0
=====[Others]=====
alloc ok: 55542559     alloc fail: 0
free ok: 55542559     free fail: 0
corrupts: 0

```

Display SSI IPC large buffer,

```

M8830_SF.2.PXM.a > dsprmrsrc 6
=====[Resource Infomation]=====
name      : SSI IPC Large Buffer state   : OK
Maximum size      : 900                  Cur size : 900(Buf)
ignoreMed         : NO                    LowWaterMark : 899
Threshold Type    : value                  poll interval: 30
Low threshold value      : 270            Medium threshold value: 292
High threshold value    : 315           Low threshold percent : 300
Medium threshold percent: 320           High threshold percent: 350

```

```

=====[Action Info]=====
          Send          Alarm
          Trap          Critical Major Minor
-----
Low Action: yes          no          yes          no
Med Action: yes          no          no          yes
Ok Action : yes          no          yes          no

```

```

=====[Statistics]=====
total poll: 132075      failed poll: 0
ok to low : 0          ok to med  : 0

```

```

med to low: 0          low to ok : 0
med to ok : 0
===== [Others] =====
alloc ok: 7784085     alloc fail: 0
free ok: 7784085     free fail: 0
corrupts: 0

```

Display SSI IPC large buffer.

```

M8830_SF.2.PXM.a > dsprmrsrc 7
===== [Resource Information] =====
name      : SSI IPC Huge Buffer   state   : OK
Maximum size      : 3000          Cur size : 2768 (Buf)
ignoreMed        : NO            LowWaterMark : 2614
Threshold Type   : value         poll interval: 30
Low threshold value : 900        Medium threshold value: 975
  High threshold value : 1050    Low threshold percent : 300
Medium threshold percent: 320    High threshold percent: 350

===== [Action Info] =====
          Send          Alarm
          Trap          Critical Major  Minor
-----
Low Action: yes         no          yes      no
Med Action: yes         no          no       yes
Ok Action : yes         no          yes      no

===== [Statistics] =====
total poll: 132075     failed poll: 0
ok to low : 0          ok to med  : 0
med to low: 0          low to ok  : 0
med to ok : 0

===== [Others] =====
alloc ok: 23810034     alloc fail: 0
free ok: 23809802     free fail: 0
corrupts: 0

```

Display SSI IPC m-block buffer.

```

M8830_SF.2.PXM.a > dsprmrsrc 8
===== [Resource Information] =====
name      : SSI IPC mblk Buffer   state   : OK
Maximum size      : 15150        Cur size : 14914 (Buf)
ignoreMed        : NO            LowWaterMark : 14740
Threshold Type   : value         poll interval: 30
Low threshold value : 1816        Medium threshold value: 1967
  High threshold value : 2119    Low threshold percent : 120
Medium threshold percent: 130    High threshold percent: 140

===== [Action Info] =====
          Send          Alarm
          Trap          Critical Major  Minor
-----
Low Action: yes         no          yes      no
Med Action: yes         no          no       yes
Ok Action : yes         no          yes      no

===== [Statistics] =====
total poll: 132075     failed poll: 0
ok to low : 0          ok to med  : 0
med to low: 0          low to ok  : 0
med to ok : 0

```

```

=====Others=====
alloc ok: 256341784      alloc fail: 0
free ok: 256341548     free fail: 0
corrupts: 0

```

Display monitored information for logical disk C.

```

M8830_SF.2.PXM.a > dspmrsrc 9
=====Resource Infomation=====
name      : Hard Disk Space - C:  state      : OK
Maximum size      : 800                      Cur size : 755(MByte)
ignoreMed         : NO                       LowWaterMark : 755
Threshold Type    : percent                   poll interval: 30
Low threshold value      : 80                Medium threshold value: 120
High threshold value    : 160                Low threshold percent : 100
Medium threshold percent: 150                High threshold percent: 200

=====Action Info=====
          Send          Alarm
          Trap          Critical Major  Minor
-----
Low Action: yes          no          yes          no
Med Action: yes          no          no           yes
Ok Action : yes          no          yes          no

=====Statistics=====
total poll: 132076      failed poll: 0
ok to low : 0           ok to med  : 0
med to low: 0           low to ok  : 0
med to ok : 0

=====Others=====

```

Display monitored information for logical disk D.

```

M8830_SF.2.PXM.a > dspmrsrc 10
=====Resource Infomation=====
name      : Hard Disk Space - D:  state      : OK
Maximum size      : 600                      Cur size : 425(MByte)
ignoreMed         : NO                       LowWaterMark : 425
Threshold Type    : percent                   poll interval: 30
Low threshold value      : 30                Medium threshold value: 42
High threshold value    : 60                Low threshold percent : 50
Medium threshold percent: 70                High threshold percent: 100

=====Action Info=====
          Send          Alarm
          Trap          Critical Major  Minor
-----
Low Action: yes          no          yes          no
Med Action: yes          no          no           yes
Ok Action : yes          no          yes          no

=====Statistics=====
total poll: 132076      failed poll: 0
ok to low : 0           ok to med  : 0
med to low: 0           low to ok  : 0
med to ok : 0

=====Others=====

```

Display monitored information for logical disk E.

```

M8830_SF.2.PXM.a > dsprmrsrc 11
=====
[Resource Infomation]=====
name      : Hard Disk Space - E:  state      : OK
Maximum size      : 100                      Cur size : 86(MByte)
ignoreMed         : NO                      LowWaterMark : 86
Threshold Type    : percent                  poll interval: 30
Low threshold value : 5                      Medium threshold value: 7
  High threshold value : 10                  Low threshold percent : 50
Medium threshold percent: 70                High threshold percent: 100

=====
[Action Info]=====
          Send          Alarm
          Trap          Critical Major  Minor
-----
Low Action: yes          no          yes          no
Med Action: yes          no          no          yes
Ok Action : yes          no          yes          no

=====
[Statistics]=====
total poll: 132076      failed poll: 0
ok to low : 0           ok to med  : 0
med to low: 0           low to ok  : 0
med to ok : 0

=====
[Others]=====

```

Display monitored information for logical disk F.

```

M8830_SF.2.PXM.a > dsprmrsrc 12
=====
[Resource Infomation]=====
name      : Hard Disk Space - F:  state      : OK
Maximum size      : 1000                     Cur size : 999(MByte)
ignoreMed         : NO                      LowWaterMark : 999
Threshold Type    : percent                  poll interval: 30
Low threshold value : 100                    Medium threshold value: 150
  High threshold value : 200                  Low threshold percent : 100
Medium threshold percent: 150                High threshold percent: 200

=====
[Action Info]=====
          Send          Alarm
          Trap          Critical Major  Minor
-----
Low Action: yes          no          yes          no
Med Action: yes          no          no          yes
Ok Action : yes          no          yes          no

=====
[Statistics]=====
total poll: 132076      failed poll: 0
ok to low : 0           ok to med  : 0
med to low: 0           low to ok  : 0
med to ok : 0

=====
[Others]=====

```

Display CPU peak utilization.

```

M8830_SF.2.PXM.a > dsprmrsrc 13
=====[Resource Infomation]=====
name      : CPU Peak Utilization  state      : OK
Maximum size      : 1000                      Cur size : 990(%)
ignoreMed         : NO                        LowWaterMark : 360
Threshold Type    : percent                    poll interval: 5
Low threshold value      : 50                Medium threshold value: 70
  High threshold value   : 100                Low threshold percent : 50
Medium threshold percent: 70                High threshold percent: 100

=====[Action Info]=====
          Send          Alarm
          Trap          Critical Major  Minor
-----
Low Action: yes          no          yes          no
Med Action: yes          no          no          yes
Ok Action : yes          no          yes          no

=====[Statistics]=====
total poll: 792456      failed poll: 0
ok to low : 0           ok to med  : 0
med to low: 0           low to ok  : 0
med to ok : 0

=====[Others]=====

```

Display monitoring of system memory.

```

M8830_SF.2.PXM.a > dsprmrsrc 14
=====[Resource Infomation]=====
name      : System Memory          state      : OK
Maximum size      : 38447712        Cur size : 32222016(Byte)
ignoreMed         : NO              LowWaterMark : 32172336
Threshold Type    : percent          poll interval: 30
Low threshold value      : 3844700   Medium threshold value: 4613640
  High threshold value   : 5767050   Low threshold percent : 100
Medium threshold percent: 120        High threshold percent: 150

=====[Action Info]=====
          Send          Alarm
          Trap          Critical Major  Minor
-----
Low Action: yes          no          yes          no
Med Action: yes          no          no          yes
Ok Action : yes          no          yes          no

=====[Statistics]=====
total poll: 132077     failed poll: 0
ok to low : 0          ok to med  : 0
med to low: 0          low to ok  : 0
med to ok : 0

=====[Others]=====

```

```

M8830_SF.2.PXM.a > dsprmrsrc 15
=====[Resource Infomation]=====
name      : SSI Timer              state      : OK
Maximum size      : 1000            Cur size : 936(/)
ignoreMed         : NO              LowWaterMark : 934
Threshold Type    : percent          poll interval: 30
Low threshold value      : 50        Medium threshold value: 60
  High threshold value   : 80        Low threshold percent : 50
Medium threshold percent: 60        High threshold percent: 80

```

```

=====[Action Info]=====
          Send          Alarm
          Trap          Critical Major  Minor
-----
Low Action: yes          no          yes          no
Med Action: yes          no          no          yes
Ok Action : yes          no          yes          no

=====[Statistics]=====
total poll: 132077      failed poll: 0
ok to low : 0           ok to med  : 0
med to low: 0           low to ok  : 0
med to ok : 0

=====[Others]=====

M8830_SF.2.PXM.a > dsprmrsrc 16
=====[Resource Infomation]=====
name      : SSI File Descriptor  state      : OK
Maximum size      : 4160          Cur size : 3960(//)
ignoreMed         : NO           LowWaterMark : 3960
Threshold Type    : percent      poll interval: 30
Low threshold value : 208        Medium threshold value: 249
  High threshold value : 332      Low threshold percent : 50
Medium threshold percent: 60      High threshold percent: 80

=====[Action Info]=====
          Send          Alarm
          Trap          Critical Major  Minor
-----
Low Action: yes          no          yes          no
Med Action: yes          no          no          yes
Ok Action : yes          no          yes          no

=====[Statistics]=====
total poll: 132077      failed poll: 0
ok to low : 0           ok to med  : 0
med to low: 0           low to ok  : 0
med to ok : 0

=====[Others]=====

M8830_SF.2.PXM.a > dsprmrsrc 17
=====[Resource Infomation]=====
name      : VxWorks File Descriptor state      : OK
Maximum size      : 500          Cur size : 372(//)
ignoreMed         : NO           LowWaterMark : 371
Threshold Type    : percent      poll interval: 30
Low threshold value : 25         Medium threshold value: 32
  High threshold value : 40      Low threshold percent : 50
Medium threshold percent: 60      High threshold percent: 80

=====[Action Info]=====
          Send          Alarm
          Trap          Critical Major  Minor
-----
Low Action: yes          no          yes          no
Med Action: yes          no          no          yes
Ok Action : yes          no          yes          no

=====[Statistics]=====
total poll: 132077      failed poll: 0
ok to low : 0           ok to med  : 0
med to low: 0           low to ok  : 0
med to ok : 0

=====[Others]=====

```

dsprmrsrcs

Display Resource Monitor Resources—PXM45, PXM1E

The **dsprmrsrcs** command displays general, high-level information about the system resources that are being monitored. The Example section shows the categories of information monitored for each resource. You can configure the *monitoring* of each resource (not the resource itself) by using the **cnfrmrsrc** command. You can see detailed information about a specific monitored resources by using the **dsprmrsrc** command.

Syntax

```
dsprmrsrcs
```

Syntax Description

This command takes no parameters.

Related Commands

cnfrmrsrc, **dsprmrsrc**, **dsprminfo**, **dsprmalms**

Attributes

Log: no State: active, standby, init Privilege: ANYUSER

Example

Display all monitored resources.

```
M8830_SF.2.PXM.a > dsprmrsrcs
Id  Name                               Max      Unit   State  Size      Low      Thresh  High  Enable
   Size                               Size
=====
0   SSI Static Memory                   300974080 Byte   OK     245114656 28893480 31301270 33709060 ON
1   SSI dynamic Memory                  41041920 Byte   OK     38132560 7387440 8003060 8618680 ON
2   SSI stats Memory                    27361280 Byte   OK     27361280 328320 355680 383040 OFF
3   SSI snmp Memory                     27361280 Byte   OK     24710256 1641600 1778400 1915200 ON
4   SSI IPC Small Buffer                  7500     Buf    OK     7496      2250    2437    2625    ON
5   SSI IPC Medium Buffer                 3000     Buf    OK     3000      900     975     1050    ON
6   SSI IPC Large Buffer                  900      Buf    OK     900       270     292     315     ON
7   SSI IPC Huge Buffer                   3000     Buf    OK     2768      900     975     1050    ON
8   SSI IPC mblk Buffer                   15150    Buf    OK     14914     1816    1967    2119    ON
9   Hard Disk Space - C:                 800      MByte  OK     755       80      120     160     ON
10  Hard Disk Space - D:                 600      MByte  OK     425       30      42      60      ON
11  Hard Disk Space - E:                 100      MByte  OK     86        5       7       10      ON
12  Hard Disk Space - F:                 1000     MByte  OK     999       100     150     200     ON
13  CPU Peak Utilization                 1000     %      OK     940       50      70      100     ON
14  System Memory                        38447712 Byte   OK     32222016 3844700 4613640 5767050 ON
15  SSI Timer                             1000     /      OK     936       50      60      80      ON
16  SSI File Descriptor                  4160     /      OK     3960      208     249     332     ON
17  VxWorks File Descriptor               500      /      OK     372       25      32      40      ON

M8830_SF.2.PXM.a >
```


dsprrtparm

Display Reroute Parameters—PXM45, PXM1E

The **dsprrtparm** command shows the current slow interval time and fast timer base. See the description of **cnfrtparm** for the function of these intervals.

Syntax

```
dsprrtparm
```

Syntax Description

This command takes no parameters.

Related Commands

```
cnfrtparm
```

Attributes

Log: no State: active, standby Privilege: ANYUSER

Example

Display the current, global reroute parameters for SPVCs. The parameters are the defaults.

```
8850_NY.7.PXM.a > dsprrtparm

Global SPVC Retry Parameters:
-----
Slow Retry Interval: 60 sec
Fast Retry Interval Base: 50 (in 100 msec)
```

dsprscrtn

Display Resource Partition—PXM1E

Displays information about a resource partition. The displayed information is shown in the example.



Note

The **dsppart** and **dsprscrtn** commands are identical. The name 'dsprscrtn' is consistent with the corresponding command in Release 1 of the MGX 8850 switch. You can use either command.

The total number of connections in the display includes control VCs. The types of control VCs are SSCOP, PNNI-RCC, and ILMI (if ILMI is enabled). To see the connection counts that do not include control VCs, use **dsppnport**.

Syntax

```
dsprscrtn <ifNum> <partId>
```

Syntax Description

<i>ifNum</i>	The range for logical interface is 1–31.
<i>partId</i>	The range for partition identifier is 1–20.

Related Commands

addrscrtn, **cnfrscrtn**, **delrscrtn**, **dsprscrtns**

Attributes

Log: no State: active, standby Privilege: ANYUSER

Example

Display configuration for partition 1 on logical port 1.

```
MGX8850.7.PXM1E.a > dsprscrtn 1 1
  Interface Number           : 1
  Partition Id               : 1           Number of SPVC: 0
  Controller Id             : 2           Number of SPVP: 0
  egr Guaranteed bw(.0001percent): 1000000 Number of SVC : 2
  egr Maximum bw(.0001percent) : 1000000
  ing Guaranteed bw(.0001percent): 1000000
  ing Maximum bw(.0001percent) : 1000000
  min vpi                    : 0
  max vpi                    : 4095
  min vci                    : 33
  max vci                    : 65535
  guaranteed connections     : 1000
  maximum connections        : 32000 maximum connections      : 4000
```

dsprscprtns

Display Resource Partitions—PXM1E

Display information for all the resource partitions on the current card. The displayed information appears the example.

For information on specific elements of a resource partition, see the description of **addrscprtnt**.



Note

The **dspparts** and **dsprscprtns** commands are identical. The name 'dsprscprtnt' is consistent with the corresponding command in Release 1 of the MGX 8850 switch. You can use either command.

Syntax

```
dsprscprtns
```

Related Commands

addrscprtnt, **delrscprtnt**, **cnfrscprtnt**, **dsprscprtnt**

Attributes

Log: no State: active, standby Privilege: ANYUSER

Example

Display all resource partitions.

```
PhattyEmre.2.PXM.a > dspparts
if part Ctlr egr egr ingr ingr min max min max min max
Num ID ID GuarBw MaxBw GuarBw MaxBw vpi vpi vci vci conn conn
      (.0001%) (.0001%) (.0001%) (.0001%)
-----
  1  1  2 1000000 1000000 1000000 1000000  0 255  1 65535  100  200

PhattyEmre.2.PXM.a >
```

dsprteoptcnf

Display Route Optimization Configuration—PXM45, PXM1E

The **dsprteoptcnf** command displays the current configuration for route optimization for a particular PNNI port. The node-level thresholds come from the **cnfrteoptthld** command. The port-level enabling, VPI/VCI range, and time for grooming come from the **cnfrteopt** command.

The **dsprteoptcnf** display shows the following:

- The node-level threshold for route optimization as a percent of reduction for the routing cost
- The node-level absolute re-route threshold for each service class
- The PNNI physical port ID
- Enable status of optimization at the port level
- The VPI/VCI range
- Interval between times that optimization begins
- Start and stop times for route optimization



Note

For a display of the node-level route optimization thresholds, use the **dsprteoptcnf** command.

Syntax

```
dsprteoptcnf <portid>
```

Syntax Description

portid If you do not specify a port, the display shows the configuration for all ports.

The format of the PNNI physical port identifier can vary, as follows:

- On a PXM45: *slot:subslot.port:subport*
- On a PXM1E for UNI/NNI back card: *slot:subslot.port:subport*. On the UNI/NNI back card, the subslot is always 2, but the *slot* depends on the chassis, as follows:
 - In an MGX 8850 chassis, *slot* is always the logical slot 7.
 - In an MGX 8830 chassis, *slot* is always the logical slot 1.
- On a PXM1E for a narrowband service module (NBSM): *slot.port*.

For more details, see the section, “PNNI Format,” in [Chapter 1, “Introduction.”](#)

Related Commands

cnfrteopt, **opte**, **dsprteoptstat**, **cnfrteoptthld**

Attributes

Log: no State: active, standby Privilege: ANYUSER

Example

Display the current route optimization configuration for port: 10:1.1:1.

```
p2spvc14.8.PXM.a > dsprteoptcnf 10:1.1:1
Route Optimization Configuration:
-----
Percentage Reduction Threshold: 15
Absolute Cost-CBR: 0
Absolute Cost-UBR: 0
Absolute Cost-ABR: 0
Absolute Cost-NRTVBR: 0
Absolute Cost-RTVBR: 0

Port          Enable  VPI/VCI Range  Interval  Time Range
10:1.1:1      no

p2spvc14.8.PXM.a >
```

dsprteoptstat

Display Route Optimization Status—PXM45, PXM1E

The **dsprteoptstat** command displays the current percent of route-cost reduction and absolute grooming thresholds for the node. This percent is a threshold that PNNI requires to determine that a route costs sufficiently less to warrant re-routing. The percent and absolute grooming threshold apply to all connections on the node. The default percent is 30%, and the absolute grooming thresholds have a default of 0. You can configure these thresholds through the **cnfrteoptthld** command. For more details on route optimization, see the **cnfrteopt** description.

Syntax

```
dsprteoptstat
```

Syntax Description

This command takes no parameters.

Related Commands

cnfrteopt, **cnfrteoptthld**, **oprtrt**, **dsprteoptstat**

Attributes

Log: no State: active, standby Privilege: ANYUSER

Example

Display the current route optimization for the switch. A percent of improvement but not absolute grooming thresholds have been configured.

```
p2spvc14.8.PXM.a > dsprteoptstat
Route Optimization Configuration:
-----
Percentage Reduction Threshold: 50
Absolute Cost-CBR:                0
Absolute Cost-UBR:                0
Absolute Cost-ABR:                0
Absolute Cost-NRTVBR:            0
Absolute Cost-RTVBR:             0

Route Optimization Status
-----

p2spvc14.8.PXM.a >
```

dspst

Display SCT—PXM1E

Display the contents of a port-level service class template (SCT). For more information on SCTs, see the **addport** description. Also, see the description of SCTs in the switch software configuration guide.

With the **dspst** command, you can display:

- Port SCTs
- A particular SCT template
- A section within the SCT (see Syntax Description for an explanation)



Note

Currently, the system does not support certain parameters in the service class templates (SCTs), so you can specify them through **addcon**, **cnfcon**, or Cisco WAN Manager. These parameters are (when applicable) PCR, SCR, and ICR.

Syntax

```
dspst <abr | gen | cosb | vcThr | cosThr> <scID> <port | card>
<oc12 | oc3 | t3plpc | t3adm | e3 | t1 | e1>
```

Syntax Description

abr	A specific part of the SCT, as follows:
gen	<ul style="list-style-type: none"> • abr: available bit rate
cosb	<ul style="list-style-type: none"> • gen: general VC
vcThr	<ul style="list-style-type: none"> • cosb: class of service buffer
cosThr	<ul style="list-style-type: none"> • vcThr: VC thresholds • cosThr: COSB thresholds
<i>scID</i>	SCT identifier in the range 1–255.
port card	Specifies the part of the card where the template applies. Enter port or card . Note The PXM1E supports only the port choice.
oc3	Line types for the SCT:
t3plpc	<ul style="list-style-type: none"> • oc3: 353207 cells/sec
t3adm	<ul style="list-style-type: none"> • t3plpc: 96000 cells/sec
e3	<ul style="list-style-type: none"> • t3adm: 104268 cells/sec
t1	<ul style="list-style-type: none"> • e3: 80000 cells/sec
e1	<ul style="list-style-type: none"> • t1: 3622 cells/sec • e1: 4528 cells/sec

Related Commands

cnfset, **dspsets**, **addset**, **delset**, **dspsetchksum**, **dspportset** (PXM1E only)

■ **dspstc****Attributes**

Log: yes

State: active, standby

Privilege: ANYUSER

Examples

Display each section in *card* SCT file number 4. You can display one section of the SCT at a time.

```
MGX8850.1.AXSM.a > dspstc bw 4 card
```

```
Service Class Template [0] : Bw and Policing Parameters
```

SERV-TYPE	PCR	SCR	MCR	MBS	CDVT	ICR
000000256	00002000	00001000	00000500	00001024	00250000	00000010
000000257	00002000	00001000	00000500	00001024	00250000	00000010
000000258	00002000	00001000	00000500	00001024	00250000	00000010
000000259	00002000	00001000	00000500	00001024	00250000	00000010
000000260	00002000	00001000	00000500	00001024	00250000	00000010
000000261	00002000	00001000	00000500	00001024	00250000	00000010
000000262	00002000	00001000	00000500	00001024	00250000	00000010
000000263	00002000	00001000	00000500	00001024	00250000	00000010
000000264	00002000	00001000	00000500	00001024	00250000	00000010
000000265	00002000	00001000	00000500	00001024	00250000	00000010
000000266	00002000	00001000	00000500	00001024	00250000	00000010
000000267	00002000	00001000	00000500	00001024	00250000	00000010

```
MGX8850.6.AXSM.a > dspstc gen 4 card
```

```
Service Class Template [0] : General Parameters
```

SERV-TYPE	COSB_NUM	BOOK_FACT	CAC_TYPE	UPC_ENB
000000256	00000003	000000100	ECAC-A	GCRA1-ENB
000000257	00000004	000000100	ECAC-A	GCRA 1 & 2
000000258	00000004	000000100	B-CAC	GCRA 1 & 2
000000259	00000004	000000100	B-CAC	GCRA 1 & 2
000000260	00000005	000000100	ECAC-A	GCRA 1 & 2
000000261	00000005	000000100	B-CAC	GCRA 1 & 2
000000262	00000005	000000100	B-CAC	GCRA 1 & 2
000000263	00000006	000000100	LCN_CAC	GCRA1-ENB
000000264	00000006	000000100	LCN_CAC	GCRA1-ENB
000000265	00000001	000000100	B-CAC	GCRA1-ENB
000000266	00000003	000000100	B-CAC	GCRA 1 & 2
000000267	00000003	000000100	B-CAC	GCRA 1 & 2

MGX8850.6.AXSM.a > **dspst cosb 4 card**

```

+-----+
|Service Class Template [00] : COSB Parameters |
+-----+
| COSB | MIN-RATE | MAX-RATE | MIN-PRIORITY | EXCESS-PRIORITY | ERS | ENABLE |
+-----+
| 0001 | 00000000 | 00000100 | 001 | 001 | 001 | ENABLE |
| 0002 | 00000000 | 00000100 | 001 | 001 | 001 | ENABLE |
| 0003 | 00000000 | 00000100 | 001 | 001 | 001 | ENABLE |
| 0004 | 00000000 | 00000100 | 001 | 001 | 001 | ENABLE |
| 0005 | 00000000 | 00000100 | 001 | 001 | 001 | ENABLE |
| 0006 | 00000000 | 00000100 | 001 | 001 | 001 | ENABLE |
| 0007 | 00000000 | 00000100 | 001 | 001 | 001 | ENABLE |
| 0008 | 00000000 | 00000100 | 001 | 001 | 001 | ENABLE |
| 0009 | 00000000 | 00000100 | 001 | 001 | 001 | ENABLE |
| 0010 | 00000000 | 00000100 | 001 | 001 | 001 | ENABLE |
| 0011 | 00000000 | 00000100 | 001 | 001 | 001 | ENABLE |
| 0012 | 00000000 | 00000100 | 001 | 001 | 001 | ENABLE |
| 0013 | 00000000 | 00000100 | 001 | 001 | 001 | ENABLE |
| 0014 | 00000000 | 00000100 | 001 | 001 | 001 | ENABLE |
| 0015 | 00000000 | 00000100 | 001 | 001 | 001 | ENABLE |
| 0016 | 00000000 | 00000100 | 001 | 001 | 001 | ENABLE |
+-----+

```

MGX8850.6.AXSM.a > **dspst vcThr 4 card**

Service Class Template [0] : VC Threshold Parameters

```

+-----+
|SERV|VC THRESH| SELECT |MAX_CELL|EFCI|CLP_LO| CLP_HI| EPD0 | SCALING|SCALING|
|TYPE|TBL IDX | THRESH | THRESH | Pct|EPDPct| Pct| Pct | COSB | Log-If|
+-----+
| 256 | 225 | DSB|00000160|100%|035%|080% | 100% | 0000001 | 0000001 |
| 257 | 226 | DSB|00001280|100%|035%|080% | 100% | 0000001 | 0000001 |
| 258 | 227 | DSB|00001280|100%|035%|080% | 100% | 0000001 | 0000001 |
| 259 | 228 | DSB|00001280|100%|035%|080% | 100% | 0000001 | 0000001 |
| 260 | 229 | DSB|00001280|100%|080%|080% | 060% | 0000001 | 0000001 |
| 261 | 230 | DSB|00001280|100%|080%|080% | 060% | 0000001 | 0000001 |
| 262 | 231 | DSB|00001280|100%|080%|080% | 060% | 0000001 | 0000001 |
| 263 | 232 | DSB|00008000|100%|080%|080% | 060% | 0000001 | 0000001 |
| 264 | 233 | DSB|00008000|100%|080%|080% | 060% | 0000001 | 0000001 |
| 265 | 234 | DSB|00008000|020%|080%|080% | 060% | 0000001 | 0000001 |
| 266 | 235 | DSB|00000160|100%|035%|080% | 100% | 0000001 | 0000001 |
| 267 | 236 | DSB|00000160|100%|035%|080% | 100% | 0000001 | 0000001 |
+-----+

```

■ **dspst**

MGX8850.6.AXSM.a > **dspst cosThr 4 card**

```

-----+
|Service Class Template [00] : COSB Threshold Parameters|
-----+
| COSB | COSBTHRES | MAX_CELL | EFCI | CLP_LO | CLP_HI | EPDO | RED | RED PROB |
|      | TBL_IDX  | THRESH  | Pct  | EPDPct  | Pct    | Pct  | PCT | FACTOR  |
-----+
| 0001 | 00114   | 00001424 | 100% | 080%   | 060%   | 100% | 025% | 00000005 | \
| 0002 | 00115   | 00001424 | 100% | 080%   | 060%   | 100% | 025% | 00000005 |
| 0003 | 00116   | 00001424 | 100% | 080%   | 060%   | 100% | 025% | 00000005 |
| 0004 | 00117   | 00001424 | 100% | 080%   | 060%   | 100% | 025% | 00000005 |
| 0005 | 00118   | 00001424 | 100% | 080%   | 060%   | 100% | 025% | 00000005 |
| 0006 | 00119   | 00001424 | 100% | 080%   | 060%   | 100% | 025% | 00000005 |
| 0007 | 00120   | 00001424 | 100% | 080%   | 060%   | 100% | 025% | 00000005 |
| 0008 | 00121   | 00001424 | 100% | 080%   | 060%   | 100% | 025% | 00000005 |
| 0009 | 00122   | 01015808 | 100% | 100%   | 100%   | 100% | 025% | 00000005 |
| 0010 | 00123   | 01015808 | 100% | 100%   | 100%   | 100% | 025% | 00000005 |
| 0011 | 00124   | 01015808 | 100% | 100%   | 100%   | 100% | 025% | 00000005 |
| 0012 | 00125   | 01015808 | 100% | 100%   | 100%   | 100% | 025% | 00000005 |
| 0013 | 00126   | 01015808 | 100% | 100%   | 100%   | 100% | 025% | 00000005 |
| 0014 | 00127   | 01015808 | 100% | 100%   | 100%   | 100% | 025% | 00000005 |
| 0015 | 00128   | 01015808 | 100% | 100%   | 100%   | 100% | 025% | 00000005 |
| 0016 | 00129   | 01015808 | 100% | 100%   | 100%   | 100% | 025% | 00000005 |
-----+

```

dspstchksum

Display SCT Checksum—PXM45, PXM1E

The **dspstchksum** command displays the stored checksum that came with the SCT and the checksum computed after the SCT arrived.

Syntax

```
dspstchksum <absolute path of file>
```

Syntax Description

absolute path of file The path begins at the root level of the C drive. See Example.

Related Commands

addstct, **dspstct**, **dspstcts**

Attributes

Log: no State: active, standby Privilege: ANYUSER

Example

Display the SCT checksum for the SCT named AXSM_SCT.PORT.5.

```
M8850_LA.8.PXM.a > dspstchksum /SCT/AXSM/AXSM_SCT.PORT.5  
Stored checksum is 0xe84c696a (3897321834)  
Computed checksum is 0xe84c696a (3897321834)  
  
M8850_LA.8.PXM.a >
```

dspsects

Display Service Class Templates—PXM45, PXM1E

The **dspsects** command lists all SCTs on the disk by default. The option for the command is the card type. The range of IDs for Cisco-provided SCTs is 1–100. The range for user-created SCT IDs is 101–255.

Syntax

```
dspsects [-cardtype < 1 | 2 | 3 | 4 | 5 >]
```

Syntax Description

-cardtype	You can specify SCTs for a particular card type. Possible entries are as follows: 1: AXSM 2: AXSM-E 3: PXM1E 4: FRSM12 5: AXSM-XG
------------------	--

Related Commands

addset, delset, cnfset, setsctver, addport, cnfport, cnfcdset, dspportset, dspcdset, dspset

Attributes

Log: no State: active, standby Privilege: ANYUSER

Example

Display all available SCTs on the hard drive. Note that one custom SCT is present SCTs

```
D5.8.PXM.a > dspsects
```

```
-----
Card  Type  ID   Major Minor Checksum  Status  Description
-----
PXM1E PORT  00002 00001 00000 0xe89d2837  valid  cisco :PXM1E_SCT.PORT.2 (upg)
PXM1E PORT  00003 00001 00000 0xe89d2837  valid  cisco :PXM1E_SCT.PORT.3 (upg)
PXM1E PORT  00004 00001 00000 0xe89d2837  valid  cisco :PXM1E_SCT.PORT.4 (upg)
PXM1E PORT  00005 00001 00000 0xe89d2837  valid  cisco :PXM1E_SCT.PORT.5 (upg)
PXM1E PORT  00006 00001 00000 0xec9e2a3a  valid  cisco :PXM1E_SCT.PORT.6 (upg)
PXM1E PORT  00332 00001 00000 0x7a16d575  valid  custom:PXM1E_SCT.PORT.232 (u)
PXM1E CARD  00002 00001 00000 0xe89d2837  valid  cisco :PXM1E_SCT.CARD.2 (upg)
PXM1E CARD  00003 00001 00000 0xe89d2837  valid  cisco :PXM1E_SCT.CARD.3 (upg)
PXM1E CARD  00004 00001 00000 0xe89d2837  valid  cisco :PXM1E_SCT.CARD.4 (upg)
-----
```

```
Unknown.7.PXM.a >
```

dspesn

Display Session—PXM45, PXM1E

The **dspesn** command displays information about all current user-sessions.

Syntax

```
dspesn [-s <session number>] [-h <command history>] [-t <information type>]
```

Syntax Description

-s	This option lets you specify a particular session to display. (To see how long a user-session has been idle, run the users command.) You can use this option with other options. For example, you can specify a particular session and display the command history (-h option). Default: all
-h	The command history shows the commands entered by the user. If you do not specify a particular session, all command histories scroll up the screen. Default: no
-t	You can specify one of three information types. Actually, for the ascending type numbers, each display simply has more information. The Example section shows the display for each type. The default usually is sufficient. Possible entries: 1, 2, or 3 Default: 1

Related Commands

delsesn, who, users

Attributes

Log: yes State: active, standby, init Privilege: SERVICE_GP

Examples

Display current user-sessions. Two sessions are active. The asterisk next to the “Session” field shows which session originated the **dspesn** command.

```
M8850_NY.7.PXM.a > dspesn

-----
> Session 0 (console):
Waiting for login...

-----
*> Session 1 (telnet):
Executing command: dspesn

user name:      david
access level:   SERVICE_GP
slot:           7
slotFallback:   1
From:           10.19.238.35

-----
> Session 2 (telnet):
Waiting for user input...

user name:      david9
access level:   GROUP1
slot:           7

slotFallback:   7
From:           10.19.238.35
```

Display user sessions and include the history of commands.

```
M8850_LA.8.PXM.a > dspesn -h yes

-----
> Session 0 (console):
Waiting for login...

-----
*> Session 1 (telnet):
Executing command: dspesn -h yes

user name:      cisco
access level:   CISCO_GP
slot:           8
slotFallback:   8
From:           171.71.29.105

History for session 1:
 1 dspcd
 2 dspver
 3 d
 4 dspver
 5 dspesn ?
 6 dspesn
 7 dspesn -s 1
 8 dspesn -s 2
 9 dspesn -s 4
10 dspesn -h yes

M8850_LA.8.PXM.a >
```

For session number 1, display information types 1, 2, and then 3.

```
M8850_LA.8.PXM.a > dspesn -s 1 -t 1
```

```
-----
*> Session 1 (telnet):
Executing command: dspesn -s 1 -t 1
```

```
user name:      cisco
access level:   CISCO_GP
slot:          8
slotFallback:  8
From:          171.71.29.105
```

```
M8850_LA.8.PXM.a >
```

```
M8850_LA.8.PXM.a > dspesn -s 1 -t 2
```

```
-----
*> Session 1 (telnet):
Executing command: dspesn -s 1 -t 2
```

```
user name:      cisco
access level:   CISCO_GP
slot:          8
slotFallback:  8
From:          171.71.29.105
pty name:      /pty/cli01.
cliPty fdPtyM: 47
cliPty fdPtyS: 50
usrCmdlnTimeout: 0x2EE0
```

```
flags: ECHO WATCHDOG SHOWSYSERR
```

```
M8850_LA.8.PXM.a > dspesn -s 1 -t 3
```

```
-----
*> Session 1 (telnet):
Executing command: dspesn -s 1 -t 3
```

```
user name:      cisco
access level:   CISCO_GP
slot:          8
slotFallback:  8
From:          171.71.29.105
pty name:      /pty/cli01.
cliPty fdPtyM: 47
cliPty fdPtyS: 50
usrCmdlnTimeout: 0x2EE0
```

```
flags: ECHO WATCHDOG SHOWSYSERR
```

```
status bits:    0xE000000D
cliInQ:         0x0006015F
usrIOfd:        0x0000004C
usrIOinflux:   0x00000001
psrOptions:     0x00000003
inTask id:     0x0018009B

outTask id:     0x001800A0
cmdTask id:     0x0018009E
```

```
Times for this session:
```

```
- timer for fd 76, tid 0x00010020, idle 4997, timeout 0
- timer for fd 76, tid 0x0018009B, idle 0, timeout 0
- timer for fd 76, tid 0x001800A0, idle 6, timeout 0
```

dspserialif

Display Serial Interface—PXM45, PXM1E

The **dspserialif** command displays the data rate on one of the serial interfaces on the PXM45-UI-S3 back card. See **cnfserialif** for an explanation. (See the switch software configuration guide for an explanation of the application of these physical ports.)

Syntax

```
dspserialif <port#>
```

Syntax Description

<i>port#</i>	Specifies the physical port:
	<ul style="list-style-type: none"> • 1=maintenance port • 2=console port.

Related Commands

addserialif, **delserialif**, **cnfserialif**

Attributes

Log: no State: active Privilege: ANYUSER

Example

Display the console port speed.

```
Jupiter_Lower.7.PXM.a > dspserialif 2
SerialPortNum   : 2
SerialPortType  : console
SerialPortSpeed : 19200
```


dspsig

Display Signaling—PXM45, PXM1E

Displays the configuration of the signaling timers for the port.

Syntax

```
dspsig <portid>
```

Syntax Description

portid The format of the PNNI physical port identifier can vary, as follows:

- On a PXM45: *slot:subslot.port:subport*
- On a PXM1E for UNI/NNI back card: *slot:subslot.port:subport*. On the UNI/NNI back card, the subslot is always 2, but the *slot* depends on the chassis, as follows:
 - In an MGX 8850 chassis, *slot* is always the logical slot 7.
 - In an MGX 8830 chassis, *slot* is always the logical slot 1.
- On a PXM1E for a narrowband service module (NBSM): *slot.port*.

For more details, see the section, “PNNI Format,” in [Chapter 1, “Introduction.”](#)

Related Commands

cnfsig

Attributes

Log: no State: active, standby Privilege: ANYUSER

Example

Display the signaling timers and crankback maximum for port 4:1.1:11.

```
SanJose.7.PXM.a > dspsig 4:1.1:11

Signaling Timers for port: 4:1.1:11

Timer           Value(secs)
-----
t301             180
t303              4
t308             30
t310             10
t316             90
t317             60
t322              4
t397            180
t398              4
t399            14

Max Crankback: 3
```

dspsigdiag

Display Signaling Diagnostic—PXM45, PXM1E

The **dspsigdiag** command displays the configured filter entries and the collection call records for the ATM signaling diagnostics.

Syntax

```
dspsigdiag {filter | rec | status} [index]
```

Syntax Description

<i>filter</i>	Display the information in the filter table.
<i>rec</i>	Display the call failure records.
<i>status</i>	Display global diagnostics status.
<i>index</i>	This field can be used with the option filter or rec . If used with filter , the configuration of the specified indexed filter entry display. If you don't specify an index, configuration of all filter entries display. If this field is used with rec , then all of the records filtered for the specified indexed filter entry display.

Related Commands

cnfsigdiag, delsigdiag, dspsigstats, clrsigstats

Attributes

Log: no State: active, standby Privilege: ANYUSER

Examples

Display the filter sets.

```
SanJose.7.PXM.a > dspsigdiag filter
```

```
F I L T E R   I N D E X   1
-----
Scope: internal, Cast Type: p2mp
Connection Kind: soft-vc
Service Category: CBR (Constant Bit Rate) UBR (Unspecified Bit Rate)
Clear Cause: 0, Initial TimerValue: 600
Max Records: 20, NumMatches: 0, Timer expiry: 600
Incoming Port: ATM0/0/1, Outgoing Port: ATM0/1/1
Calling Nsap Address:47.111122223333444455556666.777788889999.00
Calling Address Mask:FF.FFFFFFFF000000000000000000.000000000000.00
Called Nsap Address:47.111122223333444455556666.777788889999.01
Called Address Mask:FF.FFFFFFFF000000000000000000.000000000000.00
Status: active
```

```
F I L T E R   I N D E X   2
-----
```

Display the records associated with index 1.

```
SanJose.7.PXM.a > dspdiag rec 1
```

```
D I S P L A Y I N D E X    1
```

```
-----  
Scope: internal, Cast Type: p2p, Conn Indicator: Setup Failure  
Connection Kind:    switched-vc  
Service Category: UBR (Unspecified Bit Rate)  
Clear Cause: 0x29, Diagnostics: NULL  
Incoming Port: ATM1/0/3, Outgoing Port:ATM0/1/3  
Calling-Address: 47.009181000000006011000000.470803040506.00  
Calling-SubAddr: NULL  
Called-Address  : 47.009181000000006083C42C01.750203040506.00  
Called-SubAddr  : NULL  
Crankback Type  : No Crankback  
DTL's:  
NodeId:56:160:47.009181000000006011000000.006083AB9001.00 Port: 0/1/3:2  
NodeId:56:160:47.00918100000000603E7B4101.00603E7B4101.00 Port: 0/0/0:2  
NodeId:56:160:47.009181000000006083C42C01.006083C42C01.00 Port: 0
```

```
D I S P L A Y I N D E X    2
```

```
-----  
SanJose.7.PXM.a >
```

dspsigstats

Display Signaling Statistics—PXM45, PXM1E

The **dspsigstats** command displays signaling statistics for one port or all ports. See the Example section for a list of the types of statistics.

Syntax

```
dspsigstats <portid>
```

Syntax Description

If you do not enter a PNNI port ID, the display is quite long on a switch with many ports.

portid The format of the PNNI physical port identifier can vary, as follows:

- On a PXM45: *slot:subslot.port:subport*
- On a PXM1E for UNI/NNI back card: *slot:subslot.port:subport*. On the UNI/NNI back card, the subslot is always 2, but the *slot* depends on the chassis, as follows:
 - In an MGX 8850 chassis, *slot* is always the logical slot 7.
 - In an MGX 8830 chassis, *slot* is always the logical slot 1.
- On a PXM1E for a narrowband service module (NBSM): *slot.port*.

For more details, see the section, “PNNI Format,” in [Chapter 1, “Introduction.”](#)

Related Commands

cnfsigdiag, delsigdiag, dspsigdiag, clrsigstats

Attributes

Log: no State: active, standby Privilege: ANYUSER

Example

Display signaling statistics for port 7:2.10:10.

PXM1E_SJ.8.PXM.a > **dspstats 7:2.10:10**

```

Signaling Statistics for 7:2.10:10
Message                               Rcv           Xmt
-----
Call Proceeding                       1             7
Connect                               1             2
Connect Ack                           0             0
Setup                                  7             1
Release                                1             5
Release Complete                       5             1
Add Party                              0             0
Add Party Ack                          0             0
Add Party Rej                          0             0
Drop Party                             0             0
Restart                                0             0
Restart Ack                            0             0
Status                                 74837         34754
Status Enquiry                         34754         74837
Alerting                               0             0
Notify                                 0             0
Progress                               0             0
Drop Party Ack                         0             0
Party Alerting                         0             0

Last Cause/Diag/Crankback
-----
Cause                                  30
Diagnostic                             158          0          0          0
Src Crankback port count                0

```

PXM1E_SJ.8.PXM.a >

dspslotlink

Display Slot Links on a Line—PXM45, PXM1E

The **dspslotlink** command displays information about all links associated with a service module slot.

To see all tributaries associated with a particular line on an SRM, use the **dsplink** command.

Syntax

```
dsplink <slot>
```

Syntax Description

<i>slot</i>	The <i>slot</i> parameter identifies the slot number of the service module. The possible values depend on the chassis, as follow:
-------------	---

- MGX 8850: 1–6, 9–14, 17–22, 25–30
 - MGX 8830: 3–6, 10–13
-

Related Commands

addlink, cnflink, dellink, dsplink

Attributes

Log: no

State: active

Privilege: ANYUSER

dspsnmp

Display SNMP Strings—PXM45, PXM1E

The **dspsnmp** command displays the SNMP strings.

Syntax

```
dspsnmp
```

Syntax Description

This command takes no parameters.

Related Commands

```
cnfsnmp
```

Attributes

Log: no State: active Privilege: SUPER_GP

Example

Display the current SNMP strings. This example shows user-modified strings for read-write community, location, and contact strings.

```
M8850_NY.7.PXM.a > dspsnmp
M8850_NY                                      System Rev: 02.01      Nov. 29, 2001 12:49:03 PST
MGX8850                                                              Node Alarm: none

Community (rw):                      toplevel
Community (ro):                      public
System Location:                      Bldg J, room 619
System Contact:                      davids@be.com
```

dspsntp

Display SNTP Configuration—PXM45, PXM1E

The **dspsntp** command displays the configuration of the Simple Network Time Protocol (SNTP) on the current switch and the “sync” status—whether the current client is synchronized for TOD updates with the server. The configuration is the result of the **cnfsntp** command. Refer to the **cnfsntp** description for details. If the client is not synchronized with a server, the cause may be that no servers are unreachable.

Syntax

```
dspsntp
```

Syntax Description

No parameters

Related Commands

dbgsntp, **cnfsntp**, **cnfsntprrmtsvr**, **dspsntp-dbg**, **dspsntprrmtsvr**, **addsntprrmtsvr**, **dspsntpstats**

Attributes

Log: no State: active Privilege: SUPER_GP

Example

Display the SNTP configuration on the current switch.

```
M8850_LA.8.PXM.a > dspsntp
```

```
client: yes
server: no

polling: 100
waiting: 6
rollback: 100
stratum(default): 0
stratum(current): 0
sync: no
```


dspsntp-dbg

Display SNTP Debug Configuration—PXM45, PXM1E

The **dspsntp-dbg** command lets you display the SNTP debugging options. These options were configured through the **dbgsntp** command.

Syntax

```
dspsntp-dbg
```

Syntax Description

No parameters

Related Commands

dbgsntp, **cnfsntp**, **cnfsntprrmtsvr**, **dpsntp**, **dpsntprrmtsvr**, **addsntprrmtsvr**, **dpsntpstats**

Attributes

Log: no State: active, standby Privilege: ANYUSER

Example

Display the current SNTP debugging configuration on this switch.

```
M8850_LA.8.PXM.a > dspsntp-dbg

IP                level flag
-----
0.0.0.0           info  disable
```

dspsntprmtsvr

Display SNTP Remote Server—PXM45, PXM1E

The **dspsntprmtsvr** command displays the configuration of a remote switch as a server. See the **addsntprmtsvr** and **cfnstntp** descriptions for details.

Syntax

dspsntprmtsvr {*server IP addr*} | **all**

Syntax Description

<i>server IP addr</i>	Enter either the IP address of a single remote server or all to display the configuration of all remote SNTP servers.
all	Default: all

Related Commands

dbgsntp, **cfnstntp**, **cfnstntprmtsvr**, **dspsntp**, **addsntprmtsvr**, **dpsntpstats**

Attributes

Log: no State: active, standby Privilege: ANYUSER

Example

Display all remote SNTP servers. In this case, the secondary server is the current server.

```
M8850_LA.8.PXM.a > dspsntprmtsvr
SNTP server      Stratum  Version  Primary  Current
-----
172.29.52.88    0         4        yes     no
172.29.52.89    0         4        no      yes
```

dspsntpstats

Display SNTP Statistics—PXM45, PXM1E

The **dspsntpstats** command displays statistics for the Simple Network Time Protocol (SNTP) service. See the Example section of this description for a list of the statistics. To clear the statistics, use the **clrsntpstats** command. See the **cfnfsntp**, **addsntprmtsvr**, and **dspsntprmtsvr** descriptions for details about the application of SNTP in the current release.

Syntax

```
dspsntpstats
```

Syntax Description

No parameters

Related Commands

clrsntpstats, **cfnfsntp**, **addsntprmtsvr**, **dspsntprmtsvr**

Attributes

Log: no State: active, standby Privilege: ANYUSER

Example

Display current SNTP statistics for the current node.

```
M8850_LA.8.PXM.a > dspsntpstats

Statistic Counters For SNTP
-----
Receive server mode packets from servers in list: 0
Receive server mode packets from servers not in list: 0
Receive server mode packets which fail sanity check: 0
Receive server mode packets which pass sanity check: 0
Receive client mode packets: 82324
Receive other mode packets: 0
Send server mode packets: 0
Send client mode packets: 94084
Polling Timer Expire Counter: 94084
Polling Wait Timer Expire Counter: 94084
Rollback Timer Expire Counter: 47040
Rollback Wait Timer Expire Counter: 0
Switch From Primary To Secondary Counter: 11762
Switch From Secondary To Primary Counter: 11760
Switch From Secondary To Secondary Counter: 0
```

dspspvcaddr

Display SPVC Address—PXM45, PXM1E

The **dspspvcaddr** command displays the ATM end station addresses ((AESAs) associated with the PNNI physical port address for SPVCs.

Syntax

```
dspspvcaddr [port_id]
```

Syntax Description

portid The format of the PNNI physical port identifier can vary, as follows:

- On a PXM45: *slot:subslot.port:subport*
- On a PXM1E for UNI/NNI back card: *slot:subslot.port:subport*. On the UNI/NNI back card, the subslot is always 2, but the *slot* depends on the chassis, as follows:
 - In an MGX 8850 chassis, *slot* is always the logical slot 7.
 - In an MGX 8830 chassis, *slot* is always the logical slot 1.
- On a PXM1E for a narrowband service module (NBSM): *slot.port*.

For more details, see the section, “PNNI Format,” in [Chapter 1, “Introduction.”](#)

Related Commands

dspspvcprfx

Attributes

Log: no State: active, standby Privilege: ANYUSER

Examples

Display all SPVC addresses. As a follow-up, display the SPVC prefix to see how it compares to the full SPVC address.

```
M8850_NY.7.PXM.a > dspspvcaddr
```

```
Interface Id      Soft VC Address(es)
-----
1:1.2:2          47.0091.8100.0002.0003.6b5e.30cd.0000.0101.1802.00
1:1.1:3          47.0091.8100.0002.0003.6b5e.30cd.0000.0101.1803.00
1:2.1:1          47.0091.8100.0002.0003.6b5e.30cd.0000.0101.1801.00
1:2.2:4          47.0091.8100.0002.0003.6b5e.30cd.0000.0101.1804.00
6:1.1:1          47.0091.8100.0002.0003.6b5e.30cd.0000.0106.1801.00
6:1.2:2          47.0091.8100.0002.0003.6b5e.30cd.0000.0106.1802.00
7.34:34         47.0091.8100.0002.0003.6b5e.30cd.0000.0107.3b22.00
5:1.1:1          47.0091.8100.0002.0003.6b5e.30cd.0000.0105.1801.00
```

```
M8850_NY.7.PXM.a > dspspvcprfx
```

```
SPVC Node Prefix: 47.00918100000200036b5e30cd
```

```
M8850_NY.7.PXM.a >
```

Display the SPVC address first on port 1:1.1:1 then on port 1:1.4:4.

```
p2spvc5.7.PXM.a > dspspvcaddr 1:1.1:1
```

Interface Id	Soft VC Address(es)
-----	-----
1:1.1:1	47.0091.8100.0000.0010.7be9.2f6d.0000.0101.1801.00

```
p2spvc5.7.PXM.a > dspspvcaddr 1:1.4:4
```

Interface Id	Soft VC Address(es)
-----	-----
1:1.4:4	47.0091.8100.0000.0010.7be9.2f6d.0000.0101.1804.00

dspspvcrs

Display SPVC Reserve—PXM45, PXM1E

The **dspspvcrs** command displays the number of logical connection numbers on the switch that are reserved for SPVCs or SPVPs. The **cnfspvcrs** command lets you reserve the number of connections. The maximum number of reserved connections cannot exceed the maximum number of logical connections on the switch. The remainder of logical connection numbers goes to SVCs or SVPs.

Syntax

```
dspspvcrs
```

Syntax Description

This command takes no parameters.

Related Commands

```
cnfspvcrs
```

Attributes

Log: yes State: active, standby Privilege: ANYUSER

Example

Display the current number of connections reserved for SPVCs. The reserved amount is the default number of 0.

```
PhattyEmre.2.PXM.a > dspspvcrs  
reserved terminating spvc number is 0
```

```
PhattyEmre.2.PXM.a >
```

dspsvcprfx

Display SPVC Prefix—PXM45, PXM1E

The **dspsvcprfx** command displays the prefix for the switch-level SPVC address. The switch comes with a default SPVC prefix, and you can modify the prefix by executing **cnfsvcprfx**. See description of **cnfsvcprfx** for more details.

Syntax

```
dspsvcprfx
```

Syntax Description

This command takes no parameters.

Related Commands

cnfsvcprfx, **dspsvcaddr**

Attributes

Log: no State: active, standby Privilege: ANYUSER

Example

```
MGX8850.7.PXM.a > dspsvcprfx
SPVC Node Prefix: 47.00918100000100001a531c2a
```

dspsrmclksrc

Display SRM Clock Source—PXM45, PXM1E

The **dspsrmclksrc** command shows the clock source for a particular line on a Service Resource Module (SRME or SRM-3T3). If the SRM is using the “no back card” option, this command is meaningless. The possible sources are local timing and loop timing. For the local transmit clock source, the SRM has its own clock generation circuitry. For loop timing, the SRM takes the receive clock off the line and redirects it to the transmit clock signal. You can also see the clock source by using the **dspln** command.

Syntax

```
dspsrmclksrc <-lineType> <logicalslot>.<line>
```

Syntax Description

<i>-lineType</i>	The line type depends on the type of SRM: <ul style="list-style-type: none"> For SRM-3T3, type -ds3. For SRME, type -sonet.
<i>logicalslot</i>	The logical slot applies to either physical slot: for example, if the only SRM resides in slot 16, you type its logical equivalent: 15. Also, the logical slot depends on the chassis: <ul style="list-style-type: none"> In an MGX 8850 chassis, the logical slot is either 15 or 31. In an MGX 8830 chassis, the logical slot is 7.
<i>line</i>	The line depends on the type of SRM, as follows: <ul style="list-style-type: none"> On an SRME <i>line</i> is 1. On an SRM-3T3, <i>line</i> has a range of 1–3.

Related Commands

cnfsrcmclksrc

Attributes

Log: no State: active Privilege: ANYUSER

Example

Display the clock source for the SRME in slot 31. In this case, the clock comes from the SRM.

```
Unknown.7.PXM.a > dspsrmclksrc -sonet 31.1
LineNum:                31.1
LineXmtClockSource:     localTiming
```


dspsrmcnf

Display SRM Configuration—PXM45, PXM1E

The **dspsrmcnf** command shows which types of Service Resource Modules (SRM-3T3/Cs or SRMEs) reside in the switch. The display also shows the previous SRM configuration for the slot. This information pertains to the capability of the **clrsrmcnf** command to clear the SRM configuration for a particular slot.

Syntax

```
dspsrmcnf
```

Syntax Description

This command takes no parameters.

Related Commands

```
dspcds, dspcd
```

Attributes

Log: yes State: active Privilege: ANYUSER

Example

Display the current and previous configuration of the SRM slots. No SRMs have resided in the upper bay since the last time the switch configuration was cleared.

```
Unknown.7.PXM.a > dspsrmcnf
Slot-No      CardType      Prev-CardType
-----
15           NO-CARD       NO-CARD
16           NO-CARD       NO-CARD
31           SRME-OC3      SRME-OC3
32           SRME-OC3      SRME-OC3
```

dspsscop

Display SSCOP—PXM45, PXM1E

The **dspsscop** command displays information about the state of the link on the port, status inquiry and response timers, and statistics. See the **cnfsscop** description for definitions of the timers. See the **dspsscop** Example section for the details of the display.

Syntax

```
dspsscop <portid>
```

Syntax Description

-
- portid* The format of the PNNI physical port identifier can vary, as follows:
- On a PXM45: *slot:subslot.port:subport*
 - On a PXM1E for UNI/NNI back card: *slot:subslot.port:subport*. On the UNI/NNI back card, the subslot is always 2, but the *slot* depends on the chassis, as follows:
 - In an MGX 8850 chassis, *slot* is always the logical slot 7.
 - In an MGX 8830 chassis, *slot* is always the logical slot 1.
 - On a PXM1E for a narrowband service module (NBSM): *slot.port*.
-

For more details, see the section, “PNNI Format,” in [Chapter 1, “Introduction.”](#)

Related Commands

cnfsscop, **disables scop**, **dspsscopstats**

Attributes

Log: no State: active, standby Privilege: ANYUSER

Example

Display SSCOP for port 7:2.10:10. Note that for the timers, the integer is the configuration, and the status of the timer follows the numeric configuration. For example, the setting for the no-response timer is 30 seconds, and it currently is inactive.

```
PXM1E_SJ.8.PXM.a > dspsscop 7:2.10:10

SSCOP details for interface: 7:2.10:10

    Current State = enabled, Current Link State = Established State ,
SSCOP version = 3.1
    Send Sequence Number: Current = 133307, Maximum = 133337
    Send Sequence Number Acked = 133307
    Rcv Sequence Number: Lower Edge = 133306, Upper Edge = 133306, Max = 133336
    Poll Sequence Number = 360255, Poll Ack Sequence Number = 360255
    Vt(Pd) = 0    Vt(Sq) = 1
    Timer_IDLE = 10 - Active
    Timer_CC = 1 - Inactive
    Timer_POLL = 1 - Inactive
    Timer_KEEPLIVE = 5 - Inactive
    Timer_NO-RESPONSE = 30 - Inactive
    Timer_T309 = 10 - Inactive
    Max CC = 10
    Send Window = 30
    Recv Window = 30
    Current Retry Count = 0, Maximum Retry Count = 10
    AckQ count = 0, RcvQ count = 0, TxQ count = 0
    AckQ HWM = 3, RcvQ HWM = 0, TxQ HWM = 1
    Statistics -
    Pdu's Sent = 4497, Pdu's Received = 4495, Pdu's Ignored = 0
    Begin = 1/1, Begin Ack = 0/1, Begin Reject = 0/0
    End = 0/0, End Ack = 0/0
    Resync = 0/0, Resync Ack = 0/0
    Sequenced Data = 2234/2235, Sequenced Poll Data = 0/0
    Poll = 35221/32575, Stat = 32575/35221, Unsolicited Stat = 0/0
    Unassured Data = 0/0, Mgmt Data = 0/0, Unknown Pdu's = 0
    Lack of credit = 0
PXM1E_SJ.8.PXM.a >
```

dspsscopstats

Display SSCOP Statistics—PXM45, PXM1E

Displays SSCOP statistics for the port.

Syntax

```
dspsscopstats <portid>
```

Syntax Description

portid The format of the PNNI physical port identifier can vary, as follows:

- On a PXM45: *slot:subslot.port:subport*
- On a PXM1E for UNI/NNI back card: *slot:subslot.port:subport*. On the UNI/NNI back card, the subslot is always 2, but the *slot* depends on the chassis, as follows:
 - In an MGX 8850 chassis, *slot* is always the logical slot 7.
 - In an MGX 8830 chassis, *slot* is always the logical slot 1.
- On a PXM1E for a narrowband service module (NBSM): *slot.port*.

For more details, see the section, “PNNI Format,” in [Chapter 1, “Introduction.”](#)

Related Commands

cnfsscop, **disables scop**, **dspsscop**

Attributes

Log: no State: active, standby Privilege: ANYUSER

Examples

```
SanJose.7.PXM.a > dspsscopstats 4:1.1:11
SSCOP Statistics for interface: 4:1.1:11

Pdu's Sent = 1045, Pdu's Received = 1037, Pdu's Ignored = 0
Begin = 1/4, Begin Ack = 0/1, Begin Reject = 0/0
End = 0/0, End Ack = 0/0
Resync = 0/0, Resync Ack = 0/0
Sequenced Data = 160/158, Sequenced Poll Data = 0/0
Poll = 440/442, Stat = 436/440, Unsolicited Stat = 0/0
Unassured Data = 0/0, Mgmt Data = 0/0, Unknown Pdu's =
0
Lack of credit = 0

SanJose.7.PXM.a >
```

dspstatsmgr

Display Statistics Manager—PXM45, PXM1E

The **dspstatsmgr** command displays the IP address of each statistics manager. The configuration consists of the IP address of the workstation and an index that indicates the place of statistics managers in the hierarchy of managers. See the **cnfstatsmgr** description for details regarding this configuration.

Syntax

```
dspstatsmgr
```

Syntax Description

This command takes no parameters.

Related Commands

```
cnfstatsmgr
```

Attributes

Log: no State: active Privilege: ANYUSER

Example

Display the current configuration of statistics managers.

```
pswpop3-2.7.PXM.a > dspstatsmgr
Statistics Manager      IP Address
-----
Primary                0.0.0.0
Secondary              0.0.0.0
Tertiary               0.0.0.0
Statistics Master      0.0.0.0
```

dspsvcif

Display SVC Interface—PXM45, PXM1E

The **dspsvcif** command displays the SVC interface configuration done with the **svcifconfig** command. See the description of the **svcifconfig** command for applicable information.

The default is all SVC interfaces. You can also identify a particular interface.

Syntax

```
dspsvcif [interface]
```

Syntax Description

<i>interface</i>	The option lets you specify a particular interface. Enter each character in the case sensitive list: <ul style="list-style-type: none"> • InPci0 for Ethernet (the default on power-up) • atm0 for the ATM. • sl0 for SLIP
------------------	--

Related Commands

svcifconfig, **dspipif**

Attributes

Log: no State: active, standby, init Privilege: ANYUSER

dspsvcparm

Display SVC Parameters—PXM45, PXM1E

Displays global SVC parameters for the node.

Syntax

```
dspsvcparm
```

Related Commands

```
cnfe164justify
```

Attributes

Log: no State: active, standby Privilege: ANYUSER

Example

```
SanJose.7.PXM.a > dspsvcparm
Global SVC parameters
=====
E164 Address Conversion Justification :left
```

```
SanJose.7.PXM.a >
```

dspstbyclksrcs

Display Standby Clock Sources—PXM45, PXM1E

The **dspstbyclksrcs** command lets you display the clock sources on the *standby* PXM. It displays the manually configured clock sources but not the NCDP sources. This command is visible on a standby PXM only. For a description of the fields in the display, refer to the **dspelksrcs** description.

Syntax

```
dspstbyclksrcs
```

Syntax Description

This command takes no parameters.

Related Commands

enfelksrc, **dspelksrcs**

Attributes

Log: no log State: standby Privilege: ANYUSER

Example

After making sure you have logged into the standby PXM45, display the standby card's clock sources.

```
M8850_NY.8.PXM.s > dspstbyclksrcs
Primary clock type:          external clock bits0
Primary clock configured:   yes
Primary clock status:       no clock signal
Secondary clock type:       generic clock
Secondary clock configured: yes
Secondary clock status:     locked
Active clock:                secondary clock
source switchover mode:     revertive

M8850_NY.8.PXM.s >
```


dspsvcoverride

Display SVC Override—PXM45, PXM1E

The **dspsvcoverride** command displays the node-level SVC override configuration. See the **cnfsvcoverride** description for details on SVC override.

Syntax

```
dspsvcoverride
```

Syntax Description

No parameters

Related Commands

```
cnfsvcoverride
```

Attributes

Log: no State: active, standby Privilege: ANYUSER

Example

Display the current configuration for SVC override.

```
PXM1E_SJ.7.PXM.a > dspsvcoverride
spvcoverridesvc: Enabled
spvcoverridesvp: Disabled
spvpoverridesvp: Disabled
```

dspswalms

Display Switching Alarms—PXM45

The **dspswalms** command helps you isolate the cause of alarms related to the switch fabric. It shows three *types* of alarm and the severity for each type. The display applies to devices that communicate by way of the serial bus (therefore, the RPM, VISM, and other Cell Bus cards are not displayed).

The three alarm *types* are:

- XBAR CORE indicates whether the errors on the links on the fabric crossed the alarm thresholds.
- XBAR PORT indicates whether the errors on the crossbar ports (HUMVEE or any equivalent) on a service module crossed an alarm threshold.
- XBAR SLOT BANDWIDTH alarm is raised based on the number of crossbar links that are up for a service module.

The severity definition for each alarm comes from Bellcore TR-NWT-000474, as follows:

- *Critical* indicates complete, non-recoverable failure, loss of data, and so on. The failed entity must be restored. A power failure or a line being disconnected is an example.
- *Major* indicates service-affecting errors. It indicates that a major service is damaged or lost, but the existing traffic is not affected.
- *Minor* indicates non-service affecting errors or errors on a remote node. Corrective action is appropriate to prevent a serious fault from developing. An example is a fan failure, where no subscribers are immediately affected, but calamity could result if the situation persists.



Note

A sufficient accumulation of lower-severity alarms results in a higher-severity alarm.

Usage Guidelines for dspswalms Usage

After determining the error type and the related slot, you can use the crossbar troubleshooting commands to isolate the problem further.

The following is a top-down sequence of alarm-related commands that lead to isolating possible faults in the switch fabric:

1. **dspndalms** indicates the general region of the problem and can indicate the switching fabric.
2. **dspswalms** shows the error type, alarm severity, and related slot.
3. **dspdevalms** shows a recent crossbar error list by physical slot or by switching slot.
4. **dspxbarplanealms** displays the alarm status for each switch plane.
5. **dspdeverrhist** shows total crossbar error history since the last power-up or card reset by physical slot or by switching slot.

An alarm can originate in any of the following:

- The backplane or any other part of signal path that connects a service module with a switch ASIC
- Switch ASIC on the PXM45 or XM60
- Buffer circuitry on the module serviced by the switch planes

The **dspswalms** display shows how many errors have occurred and generally where the errors have occurred. For purposes of troubleshooting the switch, you can decide which card to replace by using the **dspdeverr**, **dspdevalms**, **dspxbarplanealms**, and **dspxbarslotwalms** commands. These commands can help you isolate the problem to a particular switch ASIC, the receiving card, or the link between

them. (The hardware path between the switch card and the recipient card's bus transceiver is called a *link*.) The crossbar troubleshooting commands can be either plane-centric or slot-centric. Plane-centric is from the switch ASICs outwards. Slot-centric is from a slot toward a switch ASIC. The reference point in relation to card slots is important for fault isolation.

Syntax

dspswalms

Syntax Description

This command takes no parameters.

Related Commands

dspndalms, dspdeverr, dspdeverrhist, dspdevalms, dspxbarplanealms

Attributes

Log: no State: active Privilege: ANYUSER

Examples

Display switching alarms. The display shows dashes where no card resides or where a Cell Bus card resides (for example, RPM, VISM, AUSM, and so on). Use the following sequence of commands:

6. dspswalms

7. dspxbarplanealms

8. dspxbarslotbwalms

M8850_LA.8.PXM.a > **dspswalms**

```

XBAR SWITCHING FABRIC ALARMS SUMMARY

Slot No.      Xbar Core Alarm      Xbar Port Alarm      Xbar Slot B/W alarm
              Critical Major Minor  Critical Major Minor  Critical Major Minor
-----
01             0      0      0           0      0      0           0      0      0
02             0      0      0           0      0      0           0      0      0
03             1      0      0           0      0      0           0      1      0
04             0      0      0           0      0      0           0      0      0
05             0      0      0           0      0      0           0      0      0
06             0      0      0           0      0      0           0      0      0
07             --     --     --           --     --     --           --     --     --
08             0      0      0           0      0      0           1      0      0
09             --     --     --           --     --     --           --     --     --
10             --     --     --           --     --     --           --     --     --
11             --     --     --           --     --     --           --     --     --
12             --     --     --           --     --     --           --     --     --
13             --     --     --           --     --     --           --     --     --
14             --     --     --           --     --     --           --     --     --

```

```
M8850_LA.8.PXM.a > dspxbarmplanealms
M8850_LA                      System Rev: 03.09   Feb. 17, 2003 20:23:17 GMT
MGX8850                       Node Alarm: CRITICAL
```

```

      XBAR PLANE ALARM INFO
XbarSlot Xbar Core   Xbar Plane
/plane   Alarm     Based Alarm
-----
7/0      --         --
7/1      --         --
7/2      --         --

8/0      --         --
8/1      --         --
8/2      Critical  --
```

```
M8850_LA.8.PXM.a > dspxbarslotbwalms
M8850_LA                      System Rev: 03.09   Feb. 17, 2003 20:32:56 GMT
MGX8850                       Node Alarm: CRITICAL
```

XBAR SLOT BANDWIDTH ALARM INFO SUMMARY

```

LoadSharing < Enabled >
Slot   Xbar Slot   Required no.   Available no.   Operational no.
No.    Bw Alarm     of Planes     of Planes      of Planes
-----
01     None         3             3              3
02     None         3             3              3
03     Major        1             3              2
04     None         1             3              3
05     None         2             3              3
06     None         3             3              3
07     --           --            --             --
08     Critical    1             3              2
09     --           --            --             --
10     --           --            --             --
11     --           --            --             --
12     --           --            --             --
13     --           --            --             --
14     --           --            --             --
```

```
M8850_LA.8.PXM.a >
```

dsptech

Display Key Data—PXM45, PXM1E

The **dsptech** command displays a snapshot of key nodal and controller-card information for you to use in low-level troubleshooting. The purpose of this command is to enhance the existing fault detection and isolation mechanisms. These enhancements are aimed at improving the Reliability, Availability, and Serviceability (RAS) of the Cisco MGX 8850 (Release 3 or later), MGX 8950, and MGX 8830 switches.

Definitions for individual fields in the **dsptech** output appear in [Table 2-17](#). In general, the displayed information consists of the following categories:

- The current runtime firmware version for all the slots
- Network configuration summary
- PNNI port, connection, and trunk counts
- Node alarm summary
- Clock alarm summary
- Switching alarm summary
- Environmental alarm summary
- Resource information that includes, CPU, memory and inter-process communication (IPC) buffer utilization for the active controller card
- PNNI routing and protocol counts

Related Commands

dspcds, **dsprev**, **dspcdalms**, **dspndalms**, **dspprfhist**, **dspmem**, **dsppnports**, **dsponinfo**, **dsppnni-link**, **dspscons**

Attributes

Log: no State: active, standby Privilege: ANYUSER

Field Descriptions

The definition for each field in the **dsptech** output appears in [Table 2-17](#). Note that the field names marked with an asterisk (*) mean the information comes from the active PXM.



Note

A significant number of fields have multiple data portions. In the screen output and in [Table 2-17](#), these items are separated by a slash.

Table 2-17 Description of Fields in the dsptech Output

Field Name	Description
SYSNAME	32-character node name followed by the date and time.
NWCFG*	Network configuration summary.
PNDS*	Total number of PNNI nodes available / number of PNNI levels.

Table 2-17 Description of Fields in the dsptech Output (continued)

Field Name	Description
ND CFG	Node configuration summary.
MPG*	Multi-Peer Group. The standards-based protocol supports up to 160 levels / names, but the current product supports a maximum of 10 levels.
CON	Number of master connections / number of slave connections.
CONTOT	Total number of connections provisioned / total number of connections supported.
PORT	Number of ports.
PNLINK*	The first PNLINK field (near top) shows the number of PNNI links (trunks). This count includes only the lowest level, physical links. It does not include logical links.
Front card and revision	Front card name and current runtime firmware revision appears for all slots. Note that for single-height cards, only the upper-bay slot number and card type appear. The slot numbers are reduced for a Cisco MGX 8950 or MGX8830 chassis.
NDALM	Node alarm summary.
ND	Highest alarm on the node: critical, major, minor, none.
CON	Number of failed connections.
PNLINK*	The second PNLINK field has two parts—"fl" and "2wo." The "fl" portion is the number of PNNI links that are failed, which includes the following states: down, "attempt," 1-way inside, or 1-way outside for the Hello state machine. The "2wo" portion is the number of PNNI links that are in one of the following states: 2-way outside; or Hellos have been received from the neighbor, but a common peer group containing the neighbor and this node has not been found; and common outside and 2-way inside are operational states of the hello protocol and hence are not a node alarm for a PNNI link.
PORT	Number of ports in "interface (IF) down status (failed).
CARD	The CARD field consists of the following data: number of cards in critical alarm / number of cards in major alarm / number of cards in minor alarm / number of cards with unknown alarm status / number of slots without front cards.
CLK	Number of critical clock alarms / number of major clock alarms / number of minor clock alarms
SWT	Number of critical switching alarms / number of major switching alarms / number of minor switching alarms
ENV	Number of critical environment alarms / number of major environment alarms / number of minor environment alarms
ND PRF	Node performance summary based on the previous 1 bucket (20 seconds / bucket) of CPU utilization data.
IDLE	% of processor throughput that processor was idle
INT	% of processor throughput used processing interrupts
KRL	% of processor throughput used by the RTOS kernel
UKN	% of processor throughput used by unknown source
TNAME1	% of processor throughput used by highest utilization task
TNAME2	% of processor throughput used by second highest utilization task

Table 2-17 Description of Fields in the dsptech Output (continued)

Field Name	Description
STATIC	Number of bytes available in STATIC memory partition / number of failed allocations, failed allocations cap at 9999.
DYN	Number of bytes available in DYNAMIC memory partition / number of failed allocations, failed allocations cap at 9999.
STATS	Number of bytes available in STATISTICS memory partition/ number of failed allocations, failed allocations cap at 9999.
SNMP	Number of bytes available in SNMP memory partition / number of failed allocations, failed allocations cap at 9999.
MBLK	Total number of IPC-Mblks / number of IPC-Mblks available/ number of failed allocations, failed allocations cap at 9999.
B360	Total number of IPC 360-byte data buffers / number of IPC 360-byte data buffers available / number of failed allocations, failed allocations cap at 9999.
B1K	Total number of IPC 1128-byte data buffers / number of IPC 1128-byte data buffers available/ number of failed allocations, failed allocations cap at 9999.
B4K	Total number of IPC 4200-byte data buffers / number of IPC 4200-byte data buffers available/ number of failed allocations, failed allocations cap at 9999.
B8K	Total number of IPC 8552-byte data buffers / number of IPC 8552-byte data buffers available / number of failed allocations, failed allocations cap at 9999.
DCO*	pnniDtlCountOriginator: The total number of DTL stacks that this switching system has originated as the DTL Originator and placed into signaling messages. This number includes the initial DTL stacks computed by this system as well as any alternate route (second or third choice, and so on) DTL stacks computed by this switching system in response to crankbacks.
DCB*	pnniDtlCountBorder: The number of partial DTL stacks that this switching system has added into signalling messages as an entry border node. This includes the initial partial DTL stacks computed by this system as well as any alternate route (second, third choice etc.) partial DTL stacks computed by this switching system in response to crankbacks.
CCO*	pnniCrankbackCountOriginator: This field shows the total number of connection setup messages (including DTL stacks originated by this switching system) that have cranked back to this switching system at all levels of the hierarchy.
CCB*	pnniCrankbackCountBorder: This field shows the total number of connection setup messages (including DTLs added by this switching system) as an entry border node that have cranked back to this switching system at all levels of the hierarchy. This count does not include Crankbacks for which this switching system was not the crankback <i>destination</i> . Instead, only those crankbacks that were directed to this switching system are counted.
ARCO*	pnniAltRouteCountOriginator: This field shows the total number of alternate DTL stacks that this switching system has computed and placed into signalling messages as the DTL Originator.
ARCB*	pnniAltRouteCountBorder: This field shows the total number of alternate partial DTL stacks that this switching system has computed and placed into signalling messages as an entry border node.

Table 2-17 Description of Fields in the dsptech Output (continued)

Field Name	Description
RFCO*	pnniRouteFailCountOriginator: This field shows the total number of times where the switching system failed to compute a viable DTL stack as the DTL Originator for some call. It indicates the number of times a call was cleared from this switching system due to originator routing failure.
RFCB*	pnniRouteFailCountBorder: This field shows the total number of times where the switching system failed to compute a viable partial DTL stack as an entry border node for some call. It indicates the number of times a call was either cleared or cranked back from this switching system due to border routing failure.
RFUO*	pnniRouteFailUnreachableOriginator: This field shows the total number of times where the switching system failed to compute a viable DTL stack as the DTL Originator because the destination was unreachable, i.e., those calls that are cleared with cause #2 `specified transit network unreachable' or cause #3 `destination unreachable' in the cause IE.
RFUB*	pnniRouteFailUnreachableBorder: This field shows the total number of times the switching system has failed to compute a viable, partial DTL stack as an entry border node because the target of the path calculation was unreachable. These calls were cleared or cranked back and show cause #2, “specified transit network unreachable,” or cause #3, “destination unreachable” in the cause IE.

Example

Display the key information for the current switch.

```

Wolverine.8.PXM.a > dsptech
SYSNAME: Wolverine                               Sep. 20, 2002 14:40:54 GMT
NW CFG: PNDS(tot/lvls): 00000001/00000002
ND CFG: CON(mas/slv) : 00000007/00000003
      CONTOT: 00000010/00050000 PORT: 00000004 PNLINK: 00000002
MPG   :
      056/Wolverine                               032/Wolverine-02

01/17 ---          ---          ---          ---
02/18 ---          ---          ---          ---
03/19 ---          ---          ---          ---
04/20 ---          ---          ---          ---
05/21 ---          ---          ---          ---
06   AXSM_16OC3    3.0(10.176)A
07   PXM45        3.0(11.0)D
08   PXM45        3.0(11.0)D
09   AXSM_10C48   3.0(10.176)A
10/26 ---          ---          ---          ---
11/27 ---          ---          ---          ---
12/28 ---          ---          ---          ---
13/29 ---          ---          ---          ---
14/30 ---          ---          ---          ---
15/31 SRM_3T3     ---          ---          ---
16/32 ---          ---          ---          ---
ND ALM: ND: CRITICAL CON(f1): 00000006 PNLINK(f1/2wo): 000002/000000
      PORT(ifdwn): 00000000 CARD(ct/mj/mn/ms): 00/01/00/23
      CLK(ct/mj/mn): 000000/000000/000000 SWT(ct/mj/mn): 000002/000001/000000
      ENV(ct/mj/mn): 000000/000002/000000
ND PRF: IDLE: 98 INT: 00 KRL: 00 UKN: 00
      TNAME1: 01/tChunkMon      TNAME2: 00/

```



```
DYN : 06822880/0000 STATIC: 15080080/0000 STATS: 00000000/0000
SNMP: 03975664/0000
MBLK: 00009225/00009224/0000 B360: 00006000/00006000/0000
B1K : 00002000/00002000/0000 B4K : 00000600/00000600/0000
B8K : 00000125/00000124/0000

DCO : 0000000001 DCB : 0000000000 CCO : 0000000000 CCB : 0000000000
ARCO: 0000000000 ARCB: 0000000000 RFCO: 0000007362 RFCB: 0000000000
RFUO: 0000001757 RFUB: 0000000000
```

```
Wolverine.8.PXM.a >
```

dsptopofdrlist

Display Topology Feeder List—PXM45, PXM1E

The **dsptopofdrlist** command displays the feeder nodes in the topology database. If you do not include an argument, all the feeders in the feeder database are displayed.

Syntax

```
dsptopofdrlist [-topoIndex topoIndex | -fdrIndex fdrIndex]
```

Syntax Description

-topoIndex	The topoIndex is the topology index of the node to which the feeder is attached. The obtain a list of topology indexes, use the dsptopondlist command.
-fdrIndex	You can specify a single feeder index to display that particular feeder entry.

Related Commands

cnftopogw, deltopond, dsptopogw, dsptopogwndlist, dsptopondlist

Attributes

Log: no State: active, standby Privilege: ANYUSER

Examples

Display all existing topology feeder database indexes.

```
p2spvc4.8.PXM.a > dsptopofdrlist
```

```
Index feeder name type model # lmi type shelf slot port
-----
1 pswpop9 fdrPAR 8850 feeder 1 14 7
```

```
Node Topo Index:1
Node Name:p2spvc4
Node ID:56:160:47.0091810000000001a531c77.00001a531c77.01
Local IfIndex:17700872
Local IfName:atmVirtual.14.1.8.08
```

```
Index feeder name type model # lmi type shelf slot port
-----
2 pswpop10 fdrPAR 8850 feeder 1 14 10
```

```
Node Topo Index:2
Node Name:p2spvc3
Node ID:56:160:47.0091810000000001a531c75.00001a531c75.01
Local IfIndex:17700873
Local IfName:atmVirtual.14.1.4.04
```

Display the feeder topology database for node index 1.

```
p2spvc4.8.PXM.a > dsptopofdrlist -topoIndex 1
```

Index	feeder name	type	model #	lmi type	shelf	slot	port
1	pswpop9	fdrPAR	8850	feeder	1	14	7

Node Topo Index:1

Node Name:p2spvc4

Node ID:56:160:47.00918100000000001a531c77.00001a531c77.01

Local IfIndex:17700872

Local IfName:atmVirtual.14.1.8.08

Display the topology database for feeder index 2.

```
p2spvc4.8.PXM.a > dsptopofdrlist -fdrIndex 2
```

Index	feeder name	type	model #	lmi type	shelf	slot	port
1	pswpop9	fdrPAR	8850	feeder	1	14	7

Node Topo Index:2

Node Name:p2spvc3

Node ID:56:160:47.00918100000000001a531c75.00001a531c75.01

Local IfIndex:17700873

Local IfName:atmVirtual.14.1.8.08

dsptopogw

Display Topology Gateway—PXM45, PXM1E

The **dsptopogw** command lets you see the current administrative and operational states of the node as a gateway for the persistent topology database feature. If the current switch has not been configured as a gateway for this feature, the status is Disabled/Disabled. See the description of the **cnftopogw** command for details on the operations you can perform for the persistent topology feature.

Syntax

```
dsptopogw
```

Syntax Description

No parameters

Related Commands

cnftopogw, **deltopond**, **dsptopond**, **dsptopogwndlist**

Attributes

Log: no State: active, standby Privilege: ANYUSER

Example

Display the administrative and operational status of the current switch as a gateway node. The output shows that a user either ran the **cnftopogw** command to enable this switch or enabled it through CWM.

```
M8850_LA.8.PXM.a > dsptopogw
Admin State :     ENABLED Operational State     ENABLED
M8850_LA.8.PXM.a >
```

dsptopogwndlist

Display Topology Gateway Node List—PXM45, PXM1E

The **dsptopogwndlist** command displays the nodes that function as gateway nodes for the persistent topology database feature. For details of the CLI support of the persistent topology feature, see the description of the **cnftopogw** command.

Syntax

```
dsptopogwndlist
```

Syntax Description

No parameters.

Related Commands

cnftopogw, **deltopond**, **dsptopogwndlist**, **dsptopogw**, **dsptopolinklist**

Attributes

Log: no State: active, standby Privilege: ANYUSER

Example

Display the list of nodes that are gateways for the persistent topology database.

```
M8850_LA.8.PXM.a > dsptopogwndlist

table index: 1 node name: M8850_LA
node id:56:160:47.00918100000100001a531c2a.00001a531c2a.01

M8850_LA.8.PXM.a >
```

dsptopolinklist

Display Topology Link List—PXM45, PXM1E

The **dsptopolinklist** command displays either one or all persistent link indexes. The command parameters let you narrow the scope of the display. Refer to the Example section for the contents the display.

- Local node ID
- Remote node ID
- Local port ID (the PNNI physical port ID has the format *slot:subslot,port:subport*)
- Local PnniPort Id (a logical number that is the equivalent of the PNNI physical port ID)
- Remote PnniPort Id
- Persistent topology link index
- Persistent topology node index
- Is_outside_link (to indicate if the link is outside link)

Syntax

dsptopolinklist [-**topoIndex** *topoIndex* | -**linkIndex** *linkIndex*]

Syntax Description

If you do not specify a topology or link index, the display shows all link indexes.

-topoIndex	Use this parameter to specify a single topology node index. To see a list of topology node indexes, use the dsptopondlist command.
-linkIndex	Use this parameter to specify a single topology link index.

Related Commands

cnftopogw, deltopond, dsptopogwndlist, dsptopogw, deltopolink

Attributes

Log: no State: active, standby Privilege: ANYUSER

Examples

Display all links in the topo link table. The list is large and therefore truncated.

```
PXM1E_SJ.7.PXM.a > dsptopolinklist
```

```
Number of Link Entries in Persistent Topo DataBase = 23
```

```
Persistent Topo Link Index: 1
Local Node Id           : 56:160:47.00918100000000001a533377.00001a533377.01
Remote Node Id          : 56:160:47.009181000000000036b5e31b3.00036b5e31b3.01
Local Port Id           : 7:2.9:29
Local PnniPort Id       : 17251101
```

```
Remote PnniPort Id      : 17176597
Is Outside Link         : No
Persistent Topo Node Index: 1

Persistent Topo Link Index: 2
Local Node Id           : 56:160:47.009181000000000164444518.000164444518.01
Remote Node Id          : 56:160:47.00918100000000016444459b.00016444459b.01
Local Port Id           : 5:1.1:11
Local PnniPort Id       : 17111051
Remote PnniPort Id      : 17111051
Is Outside Link         : No
Persistent Topo Node Index: 2

Persistent Topo Link Index: 3

Local Node Id           : 56:160:47.009181000000000164444518.000164444518.01
Remote Node Id          : 56:160:47.00918100000000036b5e31b3.00036b5e31b3.01
Local Port Id           : 1:2.1:21
Local PnniPort Id       : 16848917
Remote PnniPort Id      : 16848917
Is Outside Link         : No
Persistent Topo Node Index: 2

Persistent Topo Link Index: 4
Local Node Id           : 56:160:47.00918100000000016444459b.00016444459b.01
Remote Node Id          : 56:160:47.00918100000000036b5e2bb2.00036b5e2bb2.01
Local Port Id           : 1:2.1:21
Local PnniPort Id       : 16848917
Remote PnniPort Id      : 16848917
Is Outside Link         : No
Persistent Topo Node Index: 3

Persistent Topo Link Index: 5
Local Node Id           : 56:160:47.00918100000000016444459b.00016444459b.01
Remote Node Id          : 56:160:47.009181000000000164444518.000164444518.01
Local Port Id           : 5:1.1:11
Local PnniPort Id       : 17111051

Type <CR> to continue, Q<CR> to stop: q
```

dsptopondlist

Display Persistent Topology Node List—PXM45, PXM1E

The **dsptopondlist** command displays either one or all indexes in the persistent topology database.

Syntax

```
dsptopondlist [topoIndex]
```

Syntax Description

<i>topoIndex</i>	You can specify a single topology node index.
------------------	---

Related Commands

cnftopogw, deltopond, dsptopogw, dsptopogwndlist

Attributes

Log: no State: active, standby Privilege: ANYUSER

Example

Display information for topology index 1. The output shows that a total of 11 entries exists in the table but displays information for only the requested entry.

```
p2spvc14.7.PXM.a > dsptopondlist 1

Number of Entries = 11

Table Index: 1 Node Name: p2spvc14
Node ID: 56:160:47.02918100000000001a531c05.00001a531c05.01
Primary IP: 10.1.1.5
Primary IP Type: atm0
Secondary IP: 172.29.6.120
Secondary IP Type: lnPci0
SysObjId: 1.3.6.1.4.1.9.1.228
Gateway Mode DISABLED
PTSE in DB: YES

p2spvc14.7.PXM.a >
```

Display all entries in the persistent topology node list. The list of 11 is truncated.

```
p2spvc14.7.PXM.a > dsptopondlist

Number of Entries = 11

Table Index: 1 Node Name: p2spvc14
Node ID: 56:160:47.02918100000000001a531c05.00001a531c05.01
Primary IP: 10.1.1.5
Primary IP Type: atm0
Secondary IP: 172.29.6.120
Secondary IP Type: lnPci0
```


SysObjId: 1.3.6.1.4.1.9.1.228
Gateway Mode DISABLED
PTSE in DB: YES

Table Index: 2 Node Name: pswpop9
Node ID: 56:160:47.00918100000000c043002ddf.00c043002ddf.01
Primary IP: 192.0.0.0
Primary IP Type: atm0
Secondary IP: 172.29.54.41
Secondary IP Type: lnPci0
SysObjId: 1.3.6.1.4.1.9.1.242
Gateway Mode DISABLED
PTSE in DB: NO

Table Index: 3 Node Name: p2spvc7
Node ID: 56:160:47.009181000000004c113ba39.0004c113ba39.01
Primary IP: 0.0.0.0
Primary IP Type: None
Secondary IP: 172.29.6.75
Secondary IP Type: lnPci0
SysObjId: 1.3.6.1.4.1.9.1.228
Gateway Mode DISABLED
PTSE in DB: NO

Table Index: 4 Node Name: pnnises3
Node ID: 56:160:47.009181000000003071f81b63.003071f81b63.01
Primary IP: 192.0.0.0
Primary IP Type: atm0
Secondary IP: 172.29.29.72
Secondary IP Type: lnPci0
SysObjId: 1.3.6.1.4.1.9.1.242
Gateway Mode DISABLED
PTSE in DB: NO

Table Index: 5 Node Name: svcswp15
Node ID: 56:160:47.00918100000000c043002dcc.00c043002dcc.01
Primary IP: 192.0.0.0
Primary IP Type: atm0
Secondary IP: 172.29.27.90
Secondary IP Type: lnPci0
SysObjId: 1.3.6.1.4.1.9.1.242
Gateway Mode DISABLED
PTSE in DB: NO

Table Index: 6 Node Name: pnnises4
Node ID: 56:160:47.009181000000003071f80090.003071f80090.01
Primary IP: 192.0.0.0
Primary IP Type: atm0
Secondary IP: 172.29.29.73
Secondary IP Type: lnPci0
SysObjId: 1.3.6.1.4.1.9.1.242
Gateway Mode DISABLED
PTSE in DB: NO

Table Index: 7 Node Name: svcswp13
Node ID: 56:160:47.00918100000000d058ac28e9.00d058ac28e9.01
Primary IP: 192.0.0.0
Primary IP Type: atm0
Secondary IP: 0.0.0.0
Secondary IP Type: None
SysObjId: 1.3.6.1.4.1.9.1.242
Gateway Mode DISABLED

PTSE in DB: NO

Table Index: 8 Node Name: pswpop2-1
Node ID: 56:160:47.00918100000000001a531c43.00001a531c43.01
Primary IP: 0.0.0.0
Primary IP Type: None
Secondary IP: 0.0.0.0
Secondary IP Type: None
SysObjId: 1.3.6.1.4.1.9.1.228
Gateway Mode DISABLED
PTSE in DB: NO

dsptrapip

Display Trap IP—PXM45, PXM1E

The **dsptrapip** command displays the switch trap IP address. The switch must have a trap IP assigned by the **cnftrapip** command.

Syntax

```
dsptrapip
```

Syntax Description

This command takes no parameters.

Related Commands

cnftrapip, **dspttrapmgr**, **addtrapmgr**, **deltrapmgr**

Attributes

Log: yes State: active Privilege: GROUP1

Example

Assign and confirm a trap IP address.

```
SanJose.7.PXM > cnftrapip 172.27.27.184
```

```
SanJose.7.PXM > dspttrapip  
Trap IP Address :172.27.27.184
```

```
SanJose.7.PXM >
```

dsptrapmgr

Display Trap Manager—PXM45, PXM1E

Display details about all existing trap managers. The **dsptrapmgr** output shows:

- IP address of each trap manager
- Port number on the connected work station
- Row status
- Read trap flag stats
- Next trap sequence number

Of these elements, the IP address and port number result from **addtrapmgr**.

Syntax

dsptrapmgr

Syntax Description

This command takes no parameters.

Related Commands

addtrapmgr, deltrapmgr

Attributes

Log: no State: active Privilege: ANYUSER

Example

Display trap managers.

```
node19.8.PXM.a > dsptrapmgr
  ipAddress      PortNum  RowStatus  ReadTrapFlag  NextTrapSeqNum
-----
171.71.55.21    2500     Add        Off            0
172.29.65.87    2500     Add        Off            348
172.71.59.21    2500     Add        Off            0

LastTrapSeqNum:    385
NumOfValidEntries: 3
```

dsprftolerance

Display Traffic Conformance Tolerance—PXM45, PXM1E

The **dsprftolerance** command displays the configuration for the traffic conformance tolerance configured through the **cnfrftolerance** command. The tolerance is a percent in the range 0-5%. This tolerance applies to compliance with bandwidth requirements for SPVCs and SPVPs. See also the **cnfrftolerance** description.

Syntax

```
dsprftolerance
```

Syntax Description

This command takes no parameters.

Related Commands

```
cnfrftolerance
```

Attributes

Log: no State: active, standby Privilege: ANYUSER

Example

Display the current TRF tolerance. The tolerance is the default 5%.

```
Corvette.1.PXM.a > dsprftolerance
Trf Tolerance for SPVCs: 5
```

dspuplinkbert

Display Uplink Bit Error Rate Test—PXM1E

The **dspuplinkbert** command displays the configuration and current status for BERT on a line on the PXM1E UNI/NNI back card.

Syntax

dspuplinkbert <*bay.line*>

Syntax Description

bay.line The required parameter identifies the bay and line that is under test. The possible values are as follows:

- *bay*: always 2 on the PXM1E
 - *line*: 1–16 maximum but depends on the number of lines supported by the back card
-

Related Commands

cnfuplinkbert, dspuplinkbertstats, startuplinkbert, stopuplinkbert

Attributes

Log: no State: active, standby Privilege: ANYUSER

Example

Display the state of the BERT on 2.1.

```
PXM1E-IMA-227.7.PXM.a > dspuplinkbert 2.1
Line           : 2.1
BERT Admin Status : Down
Operational Status : OutOfSync
BERT Pattern    : TwoE3MinusOne
Error Insertion Rate: NoError
Tx Pattern Invert : NotInverted
Rx Pattern Invert : NotInverted
Start Date      :
```

dspuplinkbertstats

Display Uplink BERT Statistics—PXM1E

The `dspuplinkbertstats` command shows BERT statistics for a line on the PXM1E UNI/NNI back card.

Syntax

```
dspuplinkbertstats <bay.line>
```

Syntax Description

bay.line The required parameter identifies the bay and line that is under test. The possible values are as follows:

- *bay*: always 2 on the PXM1E
 - *line*: 1–16 maximum but depends on the number of lines supported by the back card
-

Related Commands

`cnfuplinkbert`, `dspuplinkbert`, `startuplinkbert`, `stopuplinkbert`

Attributes

Log: no State: active, standby Privilege: ANYUSER

Example

Display the statistics for BERT on 2.1.

```
PXM1E-IMA-227.7.PXM.a > dspuplinkbertstats 2.1
  Bert   Bits      Bit Errors   Single Bit
  Line  Received   Received    Errors Injected
  ----  -
  2.1           0           0           0

PXM1E-IMA-227.7.PXM.a >
```

dspusers

Display Users—PXM45, PXM1E

Displays all current users and their access levels if the keyword **-u** is not given. If the key word **-u** is specified, it displays the user ID and access level of that user only.

Syntax

```
dspusers [-u <userID>]
```

Syntax Description

-u Keyword that specifies the user (*userId*) to display.

Related Commands

adduser, deluser, cnfuser

Attributes

Log: no State: active, standby Privilege: ANYUSER

Example

Show all configured users.

```
raviraj.7.PXM.a > dspusers
```

```

UserId      AccessLevel
-----
cisco       CISCO_GP
service     SERVICE_GP
superuser   SUPER_GP

```

Show access level for a specified user. The user ID is “raoul.”

```
raviraj.7.PXM.a > dspusers -u raoul
```

```

UserId      AccessLevel
-----
raoul       SUPER_GP

```


dspversion

Display Version—PXM45, PXM1E

Show details for the versions of boot and runtime firmware residing on a card. Typically, you would use **dspversion** in conjunction with the commands for changing a card's firmware version. (See Related Commands section.) For example, you can use **dspversion** to see if a particular firmware version is currently running.

Version Numbering Conventions

This section describes how to interpret the *version* number of a firmware image. Commands such as **loadrev** and **setrev** require a version number rather than a filename. Similarly, **dspversion** shows the firmware version number rather than the firmware filename. Although the version number derives from the firmware filename, they are distinctly different.

Firmware Filenames

The FW directory on the hard drive contains firmware files of possibly many revisions. (Each firmware file has the *fw* file extension.) The format of a firmware filename is:

cardtype_version-element[_platform].fw

Note that *platform* is an optional field because it applies to only the PXM45. For example, a firmware file may have the name "axsm_002.000.001.001.fw." Within this filename, the version-portion is 002.000.001.001. (Note the absence of "mgx.") This version-portion has the following format:

major-release.minor-release.maintenance.patch

Using the example of axsm_002.001.001.001.fw, the version is 2.1(1.1). Similarly, if no patch were present, the version number would be 2.1(1).

The range for each *release*, *maintenance*, and *patch* is 0–255. Note that, as you read left-to-right, each element is a superset of the element on the right, and the number on the right resets to 0 or 1 when the element on its *left* is incremented. For example, if the *minor-release* number 010 rolls to 011, the *maintenance* on its right is reset to 1, so the new version in the example is 002.011.001.000. (Note the anomaly here is that the *maintenance* number resets to 1 rather than 0 because of the IOS convention of starting maintenance numbers at 1.)

Version Numbers

To derive the firmware version number, the firmware filename is altered by removing insignificant zeroes and being reformatted to include parentheses. The format of a *version* number is:

major-release.minor-release(maintenance.patch)phase

For example, the significance of 2.1(60.8)P1 is shown below:

major-release minor-release (maintenance.patch) phase

2. 1. (6.0) P1

Pre-release, developmental versions have one or two alphanumeric characters at the end of the version number, and these versions may appear in various contexts. For example, the help display for **setrev** gives examples of *revision*, but only the first two in the following list could be in *released* product. These two bullets show major release 2, minor release 1, and the minimal maintenance number of 1 (per the IOS precedent). The last three bullets show developmental revision numbers:

- 2.1(1) (note the absence of a patch number)
- 2.1(1.248) (note the patch number is 248)
- 2.1(0.1)A1 (note the phase number is A1)
- 2.1(0.10)D2 (note the phase number is D2)
- 2.1(0.248)P1, 2.1(0.1)P2, 2.1(0.113)P3, 2.1(0.10)P4

Syntax

dspversion

Syntax Description

This command takes no parameters.

Related Commands

abortrev, commitrev, loadrev, runrev, setrev, dspcd

Attributes

Log: no State: active, standby, init Privilege: ANYUSER

Example

Display the firmware version for the current PXM1E.

```
Corvette.1.PXM.a > dspversion
```

Image Type	Shelf Type	Card Type	Version	Built On
Runtime	MGX	PXM1E	3.0(10.0)D	Jun 21 2002, 14:34:16
Boot	MGX	PXM1E	3.0(0.83)D	-

dspxbar

Display Crossbar—PXM45

The **dspxbar** command displays the hardware configuration of individual switch planes. Using this or any of the crossbar commands requires a deep understanding of the switching hardware.

The Contents of the dspxbar Output

Refer to the examples to see the location of each of the following fields. The general information that **dspxbar** displays is as follows:

- Selected ASIC number (default 0 is unspecified).
- Number of the slot where the crossbar ASIC resides (7 or 8 for an MGX 8850 node or 9, 10, 25, or 26 for an MGX 8950 node).
- Number of the ASIC (0–2 in an MGX 8850 node or 0–3 in an MGX 8950 node).
- Revision number of the ASIC.
- Status of the ASIC. The status is either failed or OK. If the status is failed, the other ASICs must carry the switching load, and the throughput of the switch falls below the maximum. In this case, Cisco Systems recommends you replace the card.
- The Resync Sframe Tic is the rising edge of the clock. Sframe refers to a switch frame. (A switch frame is a 60-byte cell that carries a 53-byte ATM cell plus a special header for internal fabric use between the switching fabric and the service module.)

The crossbar configuration consists of four categories of information for each slot:

- The type of backpressure is always Inband (meaning ingress direction). A crossbar does not have buffers (as the AXSMs do) and therefore must send backpressure signals to the queuing chips on each AXSM if congestion begins to occur in the switching plane.
- The Disable Request field automatically indicates any requests to turn off a source or destination for the link between the ASIC and the service module. A user can trigger a disable request by using the **cnfxbaradmin** command.
- The Disable Data field indicates whether data transfer has been turned off for source or destination. In the current product, the field for source and destination always is No.
- The Redundancy Configuration field shows the mode of redundancy used by the ASIC and whether redundancy configuration exists for a slot. The redundancy mode is always Remap. Remap means that the switching fabric automatically maps cell transfers to the correct slot if a switchover occurs in a redundant pair. Note that, if a switchover occurs, the *logical* slot number in the endpoint ID stays the same.

The Slot column for Redundancy Configuration shows a card redundancy event, as follows: if the slot number under Redundancy Configuration *differs* from the number in the Slot Number column (far left in the example screen), a switchover between redundant cards has happened.



Note

From the number of fixed values in the preceding fields, you can see that very little can change in the crossbar configuration itself.

Syntax

dspxbar <plane>

dspxbar <xbarSlot> <plane> for XM60

Syntax Description

<i>xbarSlot</i>	The slot number of the XM60. Valid slot numbers are 9, 10, 25, and 26.
<i>plane</i>	The number of the switching plane. If you do not specify a plane, the system displays information for plane 0 as a default. In an MGX 8850 node, the range is 0–2. In an MGX 8950 node, the range is 0–3.

Related Commands

dspswalms, **dspdevalms**, **dspdeverr**, **dspdeverrhist**, **dspxbarerrthresh**

Attributes

Log: no State: active, standby, init Privilege: ANYUSER

Example

Display switch ASIC (or switch plane or crossbar) 0.

```
M8850_NY.7.PXM.a > dspxbar 0
M8850_NY                      System Rev: 02.01   Dec. 17, 2001 23:00:48 PST
MGX8850                        Node Alarm: MAJOR

                          PXM45 CROSSBAR CONFIGURATION
Crossbar Slot No: 7          Switch Asic No: 0      Status: OK
Cell Grant Mode: Unicast Pref      Resync Sframe Tic: Rising-Edge Detect
Asic Revision: 1
Slot  BACK PRESSURE  DISABLE REQUEST  DISABLE DATA  REDUNDANCY CONFIG
No   Grant  Mode      Dest   Src     Dest   Src     Mode      Slot
----  ----  -
  1  Valid  InBand    No     No     No     No     Remap     1
  2  Valid  InBand    No     No     No     No     Remap     2
  3  Valid  InBand    No     No     No     No     Remap     3
  4  Valid  InBand    No     No     No     No     Remap     4
  5  Valid  InBand    No     No     No     No     Remap     5
  6  Valid  InBand    No     No     No     No     Remap     6
  7  Valid  InBand    No     No     No     No     Remap     7
  8  Valid  InBand    No     No     No     No     Remap     8
  9  Valid  InBand    No     No     No     No     Remap     9
 10  Valid  InBand    No     No     No     No     Remap    10
 11  Valid  InBand    No     No     No     No     Remap    11
 12  Valid  InBand    No     No     No     No     Remap    12
 13  Valid  InBand    No     No     No     No     Remap    13
 14  Valid  InBand    No     No     No     No     Remap    14
```

Display switch ASIC 1 in slot 25. Note that the Redundancy Column reflects the PXM45 redundancy (with slot 7 mapping to slot 8 and slot 8 mapping to slot 7).

```
JBP2_Lower.8.PXM.a > dspxbar 25 1
JBP2_Lower                               System Rev: 02.01   Nov. 28, 2000 21:35:39 GMT
MGX8950 (JBP-2)                           Node Alarm: MAJOR

                                PXM45 CROSSBAR CONFIGURATION
Crossbar Slot No: 25                Switch Asic No: 1      Status: OK
Cell Grant Mode: Unicast Pref      Resync Sframe Tic: Rising-Edge Detect
Asic Revision: 1
Slot  BACK PRESSURE    DISABLE REQUEST  DISABLE DATA  REDUNDANCY CONFIG
   No  Grant  Mode      Dest    Src      Dest    Src      Mode      Slot
-----
   1  Valid  InBand    No     No      No     No      Remap     1
   2  Valid  InBand    No     No      No     No      Remap     2
   3  Valid  InBand    No     No      No     No      Remap     3
   4  Valid  InBand    No     No      No     No      Remap     4
   5  Valid  InBand    No     No      No     No      Remap     5
   6  Valid  InBand    No     No      No     No      Remap     6
   7  Valid  InBand    Yes    Yes     No     No      Remap     8
   8  Valid  InBand    Yes    Yes     No     No      Remap     7
  11  Valid  InBand    No     No      No     No      Remap    11
  12  Valid  InBand    No     No      No     No      Remap    12
  13  Valid  InBand    No     No      No     No      Remap    13
  14  Valid  InBand    No     No      No     No      Remap    14
  15  Valid  InBand    No     No      No     No      Remap    15
  16  Valid  InBand    No     No      No     No      Remap    16
```

The following screen illustrates remapping (and/or a switchover between redundant cards). Note that slots 12 and 14 are remapped. You could also follow up by displaying the cards. The **dspecds** output would show that the secondary card 14 is active and the primary card 12 is standby.

```
sanity-PXM45B                               System Rev:04.00   Apr. 27, 2003
18:30:12 GMT                               Node Alarm:MAJOR

                                PXM45 CROSSBAR CONFIGURATION
Crossbar Slot No: 7                Switch Asic No: 0      Status:OK
Cell Grant Mode:Unicast Pref      Resync Sframe Tic:Rising-Edge
Detect
Asic Revision:1
Slot  BACK PRESSURE    DISABLE REQUEST  DISABLE DATA  REDUNDANCY CONFIG
   No  Grant  Mode      Dest    Src      Dest    Src      Mode
Slot
-----
   1  Valid  InBand    No     No      No     No      Remap     1
   2  Valid  InBand    No     No      No     No      Remap     2
   3  Valid  InBand    No     No      No     No      Remap     3
   4  Valid  InBand    No     No      No     No      Remap     4
   5  Valid  InBand    No     No      No     No      Remap     5
   6  Valid  InBand    No     No      No     No      Remap     6
   7  Valid  InBand    No     No      No     No      Remap     7
   8  Valid  InBand    Yes    Yes     No     No      Remap     8
   9  Valid  InBand    No     No      No     No      Remap     9
  10  Valid  InBand    No     No      No     No      Remap    10
  11  Valid  InBand    No     No      No     No      Remap    11
  12  Valid  InBand    No     No      No     No      Remap    14
<<===
  13  Valid  InBand    No     No      No     No      Remap    13
  14  Valid  InBand    No     No      No     No      Remap    12
<<===
```

dspxbarerrthresh

Display Crossbar Error Threshold—PXM45

The **dspxbarerrthresh** command displays the crossbar error thresholds. A crossbar can have nine types of errors, and each error has a threshold. The errors are loss of synchronization, a variety of parity and CRC errors, and so on (see Definitions of Crossbar Errors).

The items that make up a threshold are the:

- Duration of the errored state
- Number of errors during the time period
- Upper and lower error counts within a particular alarm severity (minor, major, and critical)



Note

The default settings for crossbar error thresholds are optimal for nearly all applications. The **dspxbarerrthresh** command shows the existing thresholds. If necessary, you can change thresholds through the **cnfxbarerrthresh** command.

The two types of alarm counts for each of these severities. (Refer to the example.) The higher count is the Error Count and is the highest number of errors that triggers an alarm of a particular severity. The lower count is the Clear Count: when the number of errors drops below the Clear Count, the alarm severity drops to the next lower severity. For example (using the defaults shown in the example display), if the number of transceiver errors drops below 40 (a major alarm), the alarm turns into a minor alarm. The higher count for a minor, major, and critical alarm is the number of errors that trigger that alarm. The lower count is number of errors that causes the severity to drop to the next lower severity.

The types of errors whose thresholds are displayed are:

1. Loss of synchronization (LossOfSync)
2. Transceiver error (TransceiverErr)
3. DisparityErr—an accumulation of five ASIC-level errors
4. ParityErr—a parity error in the switch frame as a whole
5. HeaderCRCErr—a CRC error for the switch frame header
6. PayloadCRCErr—a CRC error for the switch frame payload
7. RemapTwiceErr—in a redundant configuration, if multiple slots for redundancy purposes remap to the same slot, a *remap twice* error occurs. For example, For example, if Slot 2 is remapped to slot 3 and slot 4 is also remapped to slot 3, slot 3 reports that it is remapped twice. This error is service affecting should be immediately corrected.
8. RemapRecurrErr—if one slot redirects traffic to another slot, and that other slot redirects to yet a different slot, that is a *remap recurrence* error
9. Backpressure parity error (B.P.ParityErr)—a parity error in the signaling for backpressure

Syntax

```
dspxbarerrthresh
```

Syntax Description

This command takes no parameters.

Related Commands

dspxbar, dspdevalms, dspdeverrhist

Attributes

Log: no State: active Privilege: ANYUSER

Example

Display the current crossbar error thresholds.

```
M8850_NY.7.PXM.a > dspxbarerrthresh
M8850_NY                               System Rev: 02.01   Nov. 15, 2001 14:24:30 PST
MGX8850                               Node Alarm: CRITICAL

                                CROSSBAR ERROR CONFIGURATION
Device Error      Thresh  -- MINOR --      -- MAJOR --      -- CRITICAL --
Type              Time    Clear Alarm      Clear Alarm      Clear Alarm
                  (msec)  Count Count       Count Count       Count Count
-----
LossOfSync        20000   0      3                4     15              300   301
TranscieverErr    20000   0     31                40    150             300   301
DisparityErr      20000   0     31                40    150             300   301
ParityErr         20000   300   301              300   301             300   301
HeaderCRCErr     20000   0     31                40    150             300   301
PayloadCRCErr    20000   0     31                40    150             300   301
RemapTwiceErr    20000   0      1                 0      1              300   301
RemapRecurrErr   20000   300   301              300   301             300   301
B.P.ParityErr    20000   0     31                40    150             300   301

M8850_NY.7.PXM.a >
```

On an MGX 8950, the display appears as follows:

```
JBP2_Lower.8.PXM.a > dspxbarerrthresh
JBP2_Lower                               System Rev: 02.01   Nov. 28, 2000 21:39:29 GMT
MGX8950 (JBP-2)                          Node Alarm: MAJOR

                                CROSSBAR ERROR CONFIGURATION
Device Error      Thresh  -- MINOR --      -- MAJOR --      -- CRITICAL --
Type              Time    Clear Alarm      Clear Alarm      Clear Alarm
                  (msec)  Count Count       Count Count       Count Count
-----
LossOfSync        20000   0      3                4     15              300   301
TranscieverErr    20000   0     31                40    150             300   301
DisparityErr      20000   0     31                40    150             300   301
ParityErr         20000   300   301              300   301             300   301
HeaderCRCErr     20000   0     31                40    150             300   301
PayloadCRCErr    20000   0     31                40    150             300   301
RemapTwiceErr    20000   0      1                 0      1              300   301
RemapRecurrErr   20000   300   301              300   301             300   301
B.P.ParityErr    20000   0     31                40    150             300   301
```

dspxbarmgmt

Display Crossbar Management—PXM45

The **dspxbarmgmt** command shows the configuration for load sharing, auto-shutdown, and plane alarm threshold. See the **cnfxbarmgmt** description for an explanation.



Note

The plane alarm threshold is not used in the current release.

Syntax

dspxbarmgmt

Syntax Description

This command takes no parameters.

Related Commands

cnfxbarmgmt

Attributes

Log: no

State: active, standby, init

Privilege: ANYUSER

Example

Display the crossbar management state for the current node. The settings are the defaults.

```
M8850_LA.8.PXM.a > dspxbarmgmt
M8850_LA                System Rev: 04.00   Mar. 28, 2003 01:22:24 GMT
MGX8850                 Node Alarm: MAJOR
Load Sharing: Enable
Auto Shutdown: Enable
Plane Alarm Threshold: 1
```


dspbarplanealms

Display Crossbar Plane Alarms—PXM45

The **dspbarplanealms** command displays the alarm status for each switch plane. This command can be used in the following hierarchy of plane-centric troubleshooting commands:

1. **dspswalms**
2. **dspbarplanealms**
3. **dspdeverrhist**
4. **dspdeverr**

The sequence for slot-centric troubleshooting would be as follows:

This command can be used in the following hierarchy of slot-centric troubleshooting commands:

1. **dspswalms**
2. **dspbarslotbwalms**
3. **dspbar**
4. **dspdeverrhist**
5. **dspdeverr**

Syntax

```
dspbarplanealms
```

Syntax Description

This command takes no parameters.

Related Commands

dspswalms, **dspdeverrhist**

Attributes

Log: no

State: active

Privilege: ANYUSER

Example

Display switch alarms then crossbar plane alarms.

```
M8850_LA.8.PXM.a > dspswalms
```

XBAR SWITCHING FABRIC ALARMS SUMMARY

Slot No.	Xbar Core Alarm			Xbar Port Alarm			Xbar Slot B/W alarm		
	Critical	Major	Minor	Critical	Major	Minor	Critical	Major	Minor
01	0	0	0	0	0	0	0	0	0
02	0	0	0	0	0	0	0	0	0
03	1	0	0	0	0	0	0	1	0
04	0	0	0	0	0	0	0	0	0
05	0	0	0	0	0	0	0	0	0
06	0	0	0	0	0	0	0	0	0
07	--	--	--	--	--	--	--	--	--
08	0	0	0	0	0	0	1	0	0
09	--	--	--	--	--	--	--	--	--
10	--	--	--	--	--	--	--	--	--
11	--	--	--	--	--	--	--	--	--
12	--	--	--	--	--	--	--	--	--
13	--	--	--	--	--	--	--	--	--
14	--	--	--	--	--	--	--	--	--

```
M8850_LA.8.PXM.a > dspxbarplanealms
```

```
M8850_LA                               System Rev: 03.09   Feb. 15, 2003 03:15:52 GMT
MGX8850                                Node Alarm: CRITICAL
```

XBAR PLANE ALARM INFO

XbarSlot /plane	Xbar Core Alarm	Xbar Plane Based Alarm
7/0	--	--
7/1	--	--
7/2	--	--
8/0	--	--
8/1	--	--
8/2	Critical	--

dspxbarslotbwalms

Display Crossbar Slot Bandwidth Alarms—PXM45

The **dspxbarslotbwalms** command displays crossbar alarms as viewed from the card slot (rather than the switch planes).

If a switch plane fails, the bandwidth to all slots decreases. Due to the differences in throughput on different card types, the minimum number of operational switch planes varies according to the maximum speed of the card, so this command displays the minimum number operational switch planes for each slot. For example, an OC-48 card requires at least 2.3 operational switch planes to sustain its maximum rate. If a link fails or has errors such that the auto-shutdown capability turns off a link, a major alarm is raised. If the total number of failed links causes the number of operational switch planes to fall below the minimum requirement for a card, that card goes into critical alarm.

This command can be used in the following hierarchy of slot-centric troubleshooting commands:

1. **dspswalms**
2. **dspxbarslotbwalms**
3. **dspxbar**
4. **dspdeverrhist**
5. **dspdeverr**

The display shows:

- The slot number
- The alarm severity if one exists, or “none” if no alarm exists
- The number of switch planes that each card requires
- The number of available switch planes (if load sharing is enabled on an MGX 8850 switch, the display includes the switch ASICs on the standby PXM45)
- The number of switch planes that are currently operating
- Load sharing
- Auto-shutdown

Syntax

dspxbarslotbwalms [*slot_number*]

Syntax Description

<i>slot_number</i>	You can specify a particular slot. The range depends on the chassis: <ul style="list-style-type: none"> • MGX 8850: 1–14 • MGX 8950: 1–8 and 11–16
--------------------	--

Related Commands

dspxbarplanealms, dspswalms, dspxbar, dspdeverrhist, dspdeverr

Attributes

Log: no State: active Privilege: ANYUSER

Example

Display crossbar alarms flagged by the cards. The display shows:

- Loadsharing and autosutdown are enabled. (On an MGX 8950 node, load sharing is always on.)
- One major slot alarm exists.

```
M8950_DC.7.PXM.a > dspxbarslotbwalms
M8950_DC                                      System Rev: 02.01    Dec. 15, 2001 17:22:52 PST
MGX8950 (JBP-2)                                      Node Alarm: CRITICAL
```

XBAR SLOT BANDWIDTH ALARM INFO SUMMARY

LoadSharing < Enabled >		AutoShutDown < Enabled >		
Slot No.	Xbar Slot Bw Alarm	Required no. of Planes	Available no. of Planes	Operational no. of Planes
01	Major	3	8	7
02	--	--	--	--
03	--	--	--	--
04	--	--	--	--
05	None	3	8	8
06	--	--	--	--
07	None	1	4	4
08	--	--	--	--
12	--	--	--	--
13	--	--	--	--
14	--	--	--	--
15	--	--	--	--
16	--	--	--	--

```
M8950_DC.7.PXM.a >
```

dspxbarsstatus

Display Crossbar Status—PXM45



Note

This command is obsolete, and Cisco recommends that you not use it.

The **dspxbarsstatus** command displays the status of each slot from the viewpoint of a switch plane. The meaning of “slot” in this case is the slot addressed by the specified switch plane (or switch ASIC). Each switch plane sends and receives cells to and from each card slot.

Syntax

```
dspxbarsstatus <xbarSlot> <planeIndex>
```

Syntax Description

<i>xbarSlot</i>	The slot number of the card that has the switch planes. On an MGX 8850 node, the crossbar slot numbers are 7 and 8. On an MGX 8950 node, the XM60 slot numbers are 9, 10, 25, and 26.
<i>planeIndex</i>	The number of the switching plane. For an MGX 8850 node, the range is 0–2. For an MGX 8950 node, the range is 0–3.

Related Commands

dspxbar, **dspdevalms**, **dspdeverr**, **dspxbarerrthresh**

Attributes

Log: no

State: active, standby, init

Privilege: ANYUSER

Example

Display the status of switch ASIC 0 in slot 7.

```
M8850_NY.7.PXM.a > dspxbarsstatus 7 0
M8850_NY                               System Rev: 02.01   Dec. 09, 2001 15:57:53 PST
MGX8850                                 Node Alarm: CRITICAL
Switch CD No: 7                         Switch ASIC No: 0
Operational Status Bitmap   : 0x3FFF
Error Status Bitmap:
Slot 1: 0x0
Slot 2: 0x0
Slot 3: 0x0
Slot 4: 0x0
Slot 5: 0x0
Slot 6: 0x0
Slot 7: 0x0
Slot 8: 0x0
Slot 9: 0x0
Slot 10: 0x0
Slot 11: 0x0
Slot 12: 0x0
Slot 13: 0x0
Slot 14: 0x0
Slot 15: 0x0
Slot 16: 0x0
Misc Error Bitmap: 0x0
Fabric Available Bandwidth: 6000 Mbps
Switch Card Available Bandwidth: 3000 Mbps
Highest Bandwidth Needed: 2488 Mbps
```

dumpconfigs

Dump Configurations—PXM45, PXM1E

Use the **dumpconfigs** command to dump all card configurations to either a file or the terminal. The tasks performed by this command for each slot incorporate the actions of the following commands:

- **dspversion**
- **dspcd**
- **dsplns**
- **dspcdset**

Syntax

```
dumpconfigs [terminal]
```

Syntax Description

terminal	Optional switch that directs the output to the terminal.
-----------------	--

Related Commands

dumpversions, dspversion, dspcd, dsplns, dspcdset

Attribute

Log: no State: active Privilege: ANYUSER

Example

Dump the configurations to the terminal. The display is truncated after showing several sections of the SCT assigned to the card in slot 1.

```
M8850_SF.7.PXM.a > dumpconfigs terminal
=====
==== Slot: 1 Type: AXSM_40C12 State: Active ===

(session redirected)

##### slot:1 type:AXSM_40C12 cmd: dspversion

Image Type      Shelf Type      Card Type      Version      Built On
-----
Runtime         MGX             AXSM           2.1(70.79)P1  Oct 15 2001, 13:12:35
Boot           MGX             AXSM           2.1(70.79)P1  -
```

```
##### slot:1 type:AXSM_40C12 cmd: dspcd
          Front Card          Upper Card          Lower Card
          -----          -
Card Type:          AXSM-4-622          SMFIR-2-622          SMFIR-2-622
State:              Active              Present              Present
Serial Number:      SBK045102WN          SBK04460087          SBK043902EW
Boot FW Rev:        2.1(70.79)P1          ---                  ---
SW Rev:             2.1(70.79)P1          ---                  ---
800-level Rev:      B0                    A1                   A1
Orderable Part#:    800-5774-9            800-5383-1            800-5383-1
PCA Part#:          73-4504-5              73-4125-1              73-4125-1
CLEI Code:          BAA62CUCAA            BAI9ADTAAA            BAI9ADTAAA
Reset Reason:       Power ON Reset
```

SCT File Configured Version: 1

SCT File Operational Version: 1

Card SCT Id: 5

```
#Lines #Ports #Partitions #SPVC #SPVP #SVC
-----
          3          3          3          0          0          6
```

```
Port Group[1]:
#Chans supported:32512 Lines:1.1
Port Group[2]:
#Chans supported:32512 Lines:1.2
Port Group[3]:
#Chans supported:32512 Lines:2.1
Port Group[4]:
#Chans supported:32512 Lines:2.2
```

```
##### slot:1 type:AXSM_40C12 cmd: dsplns
          Sonet Line      Line      Line      Frame      Medium Medium      Alarm      APS
          Line State      Type      Lpbk      Scramble   Line      Line      State      Enabled
          -----
          1.1      Up      sonetSts12c NoLoop      Enable      Other      ShortSMF      Clear      Disable
          1.2      Up      sonetSts12c NoLoop      Enable      Other      ShortSMF      Clear      Disable
          2.1      Up      sonetSts12c NoLoop      Enable      Other      ShortSMF      Clear      Disable
          2.2      Down    sonetSts12c NoLoop      Enable      Other      ShortSMF      Clear      Disable
```



```
##### slot:1 type:AXSM_40C12 cmd: dspcdsct bw
```

```

+-----+
| SCT - VERSION | FIRMWARE - VERSION |
| 0000000000001 | 0000000000000001 |
+-----+

```

Service Class Template [5] : Bw and Policing Parameters

```

+-----+
| SERV-TYPE | PCR | SCR | MCR | MBS | CDVT | ICR |
+-----+

```

SERV-TYPE	PCR	SCR	MCR	MBS	CDVT	ICR
VSI-SIG	00001000	01000000	00000000	00000050	00250000	00000000
CBR.1	00001000	00000000	00000000	00000001	00250000	00000000
VBR-RT.1	00001000	01000000	00000000	00000050	00250000	00000000
VBR-RT.2	00001000	01000000	00000000	00000050	00250000	00000000
VBR-RT.3	00001000	01000000	00000000	00000050	00250000	00000000
VBR-nRT.1	00001000	01000000	00000000	00000050	00250000	00000000
VBR-nRT.2	00001000	01000000	00000000	00000050	00250000	00000000
VBR-nRT.3	00001000	01000000	00000000	00000050	00250000	00000000
UBR.1	00000010	00000000	00000000	00000001	00250000	00000000
UBR.2	00000010	00000000	00000000	00000001	00250000	00000000
ABR	00000010	00000000	01000000	00000001	00250000	00000000
CBR.2	00001000	00000000	00000000	00000001	00250000	00000000
CBR.3	00001000	00000000	00000000	00000001	00250000	00000000
TagCOS-0c	00001000	00010000	00001000	00000800	00250000	00000100
TagCOS-1c	00001000	00010000	00001000	00000800	00250000	00000100
TagCOS-2c	00001000	00010000	00001000	00000800	00250000	00000100
TagCOS-3c	00001000	00010000	00001000	00000800	00250000	00000100
TagCOS-4c	00001000	00010000	00001000	00000800	00250000	00000100
TagCOS-5c	00001000	00010000	00001000	00000800	00250000	00000100
TagCOS-6c	00001000	00010000	00001000	00000800	00250000	00000100
TagCOS-7c	00001000	00010000	00001000	00000800	00250000	00000100

```
##### slot:1 type:AXSM_40C12 cmd: dspcdsct gen
```

```

+-----+
| SCT - VERSION | FIRMWARE - VERSION |
| 0000000000001 | 0000000000000001 |
+-----+

```

Service Class Template [5] : General Parameters

```

+-----+
| SERV-TYPE | COSB_NUM | CAC_TYPE | UPC_ENB | CLP-SELEC | GCRA-1 | GC |
+-----+

```

SERV-TYPE	COSB_NUM	CAC_TYPE	UPC_ENB	CLP-SELEC	GCRA-1	GC
VSI-SIG	00000016	B-CAC	DISABLED	00000002	DISCARD	
CBR.1	00000003	B-CAC	DISABLED	00000003	DISCARD	
VBR-RT.1	00000004	B-CAC	DISABLED	00000002	DISCARD	
VBR-RT.2	00000004	B-CAC	DISABLED	00000001	DISCARD	
VBR-RT.3	00000004	B-CAC	DISABLED	00000001	DISCARD	
VBR-nRT.1	00000005	B-CAC	DISABLED	00000002	DISCARD	
VBR-nRT.2	00000005	B-CAC	DISABLED	00000001	DISCARD	
VBR-nRT.3	00000005	B-CAC	DISABLED	00000001	DISCARD	
UBR.1	00000006	LCN_CAC	DISABLED	00000003	DISCARD	
UBR.2	00000006	LCN_CAC	DISABLED	00000003	DSCD/SET-CLP	
ABR	00000001	B-CAC	DISABLED	00000003	DISCARD	
CBR.2	00000003	B-CAC	DISABLED	00000003	DISCARD	
CBR.3	00000003	B-CAC	DISABLED	00000001	DISCARD	
TagCOS-0c	00000007	LCN_CAC	DISABLED	00000001	DISCARD	
TagCOS-1c	00000008	LCN_CAC	DISABLED	00000001	DISCARD	
TagCOS-2c	00000009	LCN_CAC	DISABLED	00000001	DISCARD	
TagCOS-3c	00000010	LCN_CAC	DISABLED	00000001	DISCARD	
TagCOS-4c	00000007	LCN_CAC	DISABLED	00000001	DISCARD	

```

| TagCOS-5c | 00000008 | LCN_CAC | DISABLED | 000000001 | DISCARD |
| TagCOS-6c | 00000009 | LCN_CAC | DISABLED | 000000001 | DISCARD |
| TagCOS-7c | 00000010 | LCN_CAC | DISABLED | 000000001 | DISCARD |
+-----+

```

```
##### slot:1 type:AXSM_40C12 cmd: dspcdsct cosb
```

Display the error status bitmap for switch plane 3 on the XM60 in slot 25.

```

M8950_DC.7.PXM.a > dspxbarstatus 25 3
M8950_DC                               System Rev: 02.01   Dec. 09, 2001 17:48:29 PST
MGX8950 (JBP-2)                          Node Alarm: CRITICAL
Switch CD No: 25                         Switch ASIC No: 3
Operational Status Bitmap   : 0xFC3F
Error Status Bitmap:
Slot 1: 0x0
Slot 2: 0x0
Slot 3: 0x0
Slot 4: 0x0
Slot 5: 0x0
Slot 6: 0x0
Slot 7: 0x0
Slot 8: 0x0
Slot 9: 0x0
Slot 10: 0x0
Slot 11: 0x0
Slot 12: 0x0
Slot 13: 0x0
Slot 14: 0x0
Slot 15: 0x0
Slot 16: 0x0
Misc Error Bitmap: 0x0
Fabric Available Bandwidth: 7000 Mbps
Switch Card Available Bandwidth: 2000 Mbps
Highest Bandwidth Needed: 2488 Mbps

```

dumptrace

Dump Trace—PXM45, PXM1E

The output of **dumptrace** is a filename. Provide this name to **dsplog -log** option to see its contents.

Syntax

```
dumptrace
```

Syntax Description

This command takes no parameters.

Related Commands

dsplog, **dsplogs**

Attributes

Log: no State: active, standby Privilege: SERVICE_GP

Example

Execute **dumptrace**, then view the contents with **dsplog**.

```
pop20one.7.PXM.a > dumptrace
The trace is saved in file error50.log
```

Display the contents of error log file 50. This example shows only the first screen.

```
pop20two.7.PXM.a > dsplog -log error50
07-00140 11/30/2000-23:10:59 SCM-4-RESP_TIMEOUT
          tSCM          0x80260d20
          Timeout waiting for response for slot 9, report to PMM
07-00139 11/30/2000-23:10:20 CLI-7-CMDLOG
          tDbgCmdTsk 0x80377d9c
          cliCmdLog: cisco@console: "cnfname pop20two".
07-00138 11/30/2000-23:10:20 PROO-6-soPRctcEvRcv
          PnProot      0x8068b894
          proot_ctc_event_hdlr(): received EVENT 0x63 from CTC
07-00137 11/30/2000-23:10:08 CLI-7-CMDLOG
          tDbgInTask 0x80377d9c
          cliCmdLog: cisco@console: (cc 7).
07-00134 11/30/2000-23:08:23 SHM_-7-CARD_FAIL
          ShelfMgr    0x802e73b4
          SHM: slot 9 failed reason SHM_CDF_MAX_RESETS_REACHED [7]
07-00135 11/30/2000-23:08:23 SHM_-7-ALM_SET
          ShelfMgr    0x8030ccf4
          SHM Alarm Raised: pslot: 9, AlarmId: 0x2800b(SHM_ALM_NON_RES_FC_FAILED) - 3 dropped
```

dumpversions

Dump Versions—PXM45, PXM1E

The **dumpversions** command performs the following functions for all card slots and write the information to either a file on disk or the terminal:

- **dspcds**
- **dspversion**
- **dspcd**

The output begins by performing the **dspcds** command then continues by performing **dspversion** and **dspcd** for each slot. Without the optional parameter, the operation causes the output to go to the hard disk and displays the complete path to the file.



Note

To dump the contents of the SCTs assigned to each card, use the **dumpconfigs** command.

Syntax

```
dumpversions [terminal]
```

Syntax Description

terminal	Optional switch that directs the output to the terminal.
-----------------	--

Related Commands

dspcds, **dspcd**, **dspversion**, **dumpconfigs**

Attributes

Log: no State: active Privilege: ANYUSER

Example

Run **dumpversions** without the optional parameter. The filename appears in the output.

```
M8850_SF.7.PXM.a > dumpversions
INFO: Output will be saved to C:/DUMP/dumpversions.01
.....
To display output on terminal, use "dumpversions terminal"
```

Run **dumpversions** without the optional parameter. The example display is truncated after a few card slots. Note that the output does not show the contents of the SCTs.

```
M8850_SF.7.PXM.a > dumpversions terminal

##### slot:7 type:PXM45B cmd: dspcds
M8850_SF System Rev: 02.01 Nov. 25, 2001 19:25:59 PST
Chassis Serial No: UNKNOWN Chassis Rev: GMT Offset: -8
Node Alarm: CRITICAL

Card Front/Back Card Alarm Redundant Redundancy
Slot Card State Type Status Slot Type
---
01 Active/Active AXSM_40C12 NONE NA NO REDUNDANCY
02 Active/Active AXSM_40C12 NONE NA NO REDUNDANCY
03 Empty --- --- ---
04 Empty --- --- ---
05 Active/Active AXSM_10C48_B NONE NA NO REDUNDANCY
06 Empty --- --- ---
07 Active/Active PXM45B NONE 08 PRIMARY SLOT
08 Standby/Active PXM45B NONE 07 SECONDARY SLOT
09 Active/Empty XM_60 NONE NA NO REDUNDANCY
10 Active/Empty XM_60 NONE NA NO REDUNDANCY
11 Empty --- --- ---
12 Empty --- --- ---
13 Empty --- --- ---
14 Empty --- --- ---
15 Empty --- --- ---
16 Empty --- --- ---
25 Active/Empty XM_60 NONE NA NO REDUNDANCY
26 Active/Empty XM_60 NONE NA NO REDUNDANCY

=====
==== Slot: 1 Type: AXSM_40C12 State: Active ===

(session redirected)

##### slot:1 type:AXSM_40C12 cmd: dspversion

Image Type Shelf Type Card Type Version Built On
-----
Runtime MGX AXSM 2.1(70.79)P1 Oct 15 2001, 13:12:35
Boot MGX AXSM 2.1(70.79)P1 -

##### slot:1 type:AXSM_40C12 cmd: dspcd

Front Card Upper Card Lower Card
-----

Card Type: AXSM-4-622 SMFIR-2-622 SMFIR-2-622
State: Active Present Present
Serial Number: SBK045102WN SBK04460087 SBK043902EW
Boot FW Rev: 2.1(70.79)P1 --- ---
SW Rev: 2.1(70.79)P1 --- ---
800-level Rev: B0 A1 A1
Orderable Part#: 800-5774-9 800-5383-1 800-5383-1
PCA Part#: 73-4504-5 73-4125-1 73-4125-1
CLEI Code: BAA62CUCAA BAI9ADTAAA BAI9ADTAAA
Reset Reason: Power ON Reset

SCT File Configured Version: 1

SCT File Operational Version: 1
Card SCT Id: 5
```

```

#Lines #Ports #Partitions  #SPVC  #SPVP  #SVC
-----
      3      3          3      0      0      6

Port Group[1]:
#Chans supported:32512  Lines:1.1
Port Group[2]:
#Chans supported:32512  Lines:1.2
Port Group[3]:
#Chans supported:32512  Lines:2.1
Port Group[4]:
#Chans supported:32512  Lines:2.2
=====
==== Slot: 2 Type: AXSM_40C12  State: Active ===

(session redirected)

##### slot:2 type:AXSM_40C12 cmd: dspversion

```