

Commands: show c

COMMAND DESCRIPTION

Copyright

© Ericsson AB 2009–2011. All rights reserved. No part of this document may be reproduced in any form without the written permission of the copyright owner.

Disclaimer

The contents of this document are subject to revision without notice due to continued progress in methodology, design and manufacturing. Ericsson shall have no liability for any error or damage of any kind resulting from the use of this document.

Trademark List

SmartEdge is a registered trademark of Telefonaktiebolaget LM Ericsson.

NetOp is a trademark of Telefonaktiebolaget LM Ericsson.



Contents

1	Command Descriptions	1
1.1	show card	1
1.2	show card acl log	2
1.3	show card adjacency	3
1.4	show card atm table	5
1.5	show card circuit	6
1.6	show card clips	8
1.7	show card dot1q table	10
1.8	show card fib	11
1.9	show card ism	13
1.10	show card link-group	15
1.11	show card mpls	17
1.12	show card nat	19
1.13	show card packet local statistics	22
1.14	show card pbr	24
1.15	show card port	26
1.16	show card ppp	27
1.17	show card pppoe	29
1.18	show card qos	30
1.19	show card traffic	32
1.20	show ces	33
1.21	show ces domain	36
1.22	show ces excessive-packet-loss-rate	38
1.23	show chassis	41
1.24	show chassis power	47
1.25	show circuit	50
1.26	show circuit counters	57
1.27	show circuit counters (ces)	68
1.28	show circuit counters circuit-group	70
1.29	show circuit counters port-pseudowire	78
1.30	show circuit-group	80
1.31	show circuit mip-fa	82



1.32	show circuit vpls	84
1.33	show clips	85
1.34	show clips-group	89
1.35	show clock	90
1.36	show clock-source	92
1.37	show community-list	94
1.38	show configuration	95
1.39	show configuration acl	101
1.40	show configuration arp	103
1.41	show configuration asp	104
1.42	show configuration bgp	105
1.43	show configuration cfm	108
1.44	show configuration (circuits)	110
1.45	show configuration context	115
1.46	show configuration dhcp	116
1.47	show configuration dhcpv6	118
1.48	show configuration dpi	119
1.49	show configuration flow	121
1.50	show configuration forward	123
1.51	show configuration hr	125
1.52	show configuration igmp	127
1.53	show configuration isis	128
1.54	show configuration l2vpn	131
1.55	show configuration ldp	132
1.56	show configuration mobile-ip	133
1.57	show configuration mpls	134
1.58	show configuration mpls-static	135
1.59	show configuration msdp	137
1.60	show configuration nat	138
1.61	show configuration nd	140
1.62	show configuration ntp	141
1.63	show configuration ospf	143
1.64	show configuration ospf3	144
1.65	show configuration pim	145
1.66	show configuration policy (ACL)	147
1.67	show configuration policy	148



1.68	show configuration qos	150
1.69	show configuration rip	153
1.70	show configuration ripng	155
1.71	show configuration rsvp	156
1.72	show configuration snmp	158
1.73	show configuration sse	160
1.74	show configuration static	161
1.75	show context	162
1.76	show crashfiles	164
1.77	show cspf database	165



Commands: show c



1 Command Descriptions

Commands starting with “show c” are included.

This document applies to both the Ericsson SmartEdge® and SM family routers. However, the software that applies to the SM family of systems is a subset of the SmartEdge OS; some of the functionality described in this document may not apply to SM family routers.

For information specific to the SM family chassis, including line cards, refer to the SM family chassis documentation.

For specific information about the differences between the SmartEdge and SM family routers, refer to the Technical Product Description *SM Family of Systems* (part number 5/221 02-CRA 119 1170/1) in the **Product Overview** folder of this Customer Product Information library.

1.1 show card

```
show card slot
```

1.1.1 Purpose

Displays the active status and statistics of the specified card.

Warning!

Use the `show card` command for debug purposes only to collect data when a problem or outage is seen at the customer node. Some `show card` commands might impact card performance.

1.1.2 Command Mode

All modes (10)

1.1.3 Syntax Description

<code>slot</code>	Chassis slot number of the traffic card.
-------------------	--



1.1.4 Default

None

1.1.5 Usage Guidelines

Use this command to collect data when a problem or outage occurs at the customer node. Because the output of the command is intended for use by the support engineers, the output format might differ from typical **show** command output and might not be readable.

1.1.6 Example

The following example shows partial output for the **show card** command:

```
[local]Ericsson#show card 10
```

```
-----  
Slot number           : 10  
Configured-type       : ge-10-port  
Installed-type        : ge-10-port  
Initialized           : Yes  
Card Admin State      : No Shut  
IPPA running          : Yes  
EPPA running          : Yes  
Card PPAs Up          : Yes  
Default Line Card     : No  
Chassis Entitlement    : All (0x0)  
Ports Entitled        : All  
Lossless Flow Control : Enabled
```

```
(continues...)
```

1.2 show card acl log

```
show card slot acl log
```

1.2.1 Purpose

Displays the access control list (ACL) message log for the specified card.

Warning!

Use the **show card acl log** command for debug purposes only to collect data when a problem or outage is seen at the customer node. Some **show card** commands might impact card performance.



1.2.2 Command Mode

All modes (10)

1.2.3 Syntax Description

slot | Chassis slot number of the traffic card.

1.2.4 Default

None

1.2.5 Usage Guidelines

Use this command to collect data when a problem or outage occurs at the customer node. Because the output of the command is intended for use by the support engineers, the output format might differ from typical **show** command output and might not be readable.

1.2.6 Example

The following example shows partial output for the **show card acl log** command:

```
[local]Ericsson#show card 9 acl log
Slot 9 Ingress:
Last updated entry index: 343
Index  HdrId Subid Len Data
0      4      0 152 unbind cct 255/16:1023:63/5/2/1179
1      4      0 152 unbind cct 255/16:1023:63/5/2/973
2      4      0 152 unbind cct 255/16:1023:63/5/2/2229
3      4      0 152 unbind cct 255/16:1023:63/5/2/2047
4      4      0 152 unbind cct 255/16:1023:63/5/2/2113
5      4      0 152 unbind cct 255/16:1023:63/5/2/903
6      4      0 152 unbind cct 255/16:1023:63/5/2/1209
7      4      0 152 unbind cct 255/16:1023:63/5/2/2093
8      4      0 152 unbind cct 255/16:1023:63/5/2/1783
9      4      0 152 unbind cct 255/16:1023:63/5/2/2149
10     4      0 152 unbind cct 255/16:1023:63/5/2/1177

(continues...)
```

1.3 show card adjacency

show card slot adjacency [brief]

1.3.1 Purpose

Displays adjacency information for the specified card.



Warning!

Use the `show card adjacency` command for debug purposes only to collect data when a problem or outage is seen at the customer node. Some `show card` commands might impact card performance.

1.3.2 Command Mode

All modes (10)

1.3.3 Syntax Description

<i>slot</i>	Chassis slot number of the traffic card.
<i>brief</i>	Optional. Limits output to one line per adjacency.

1.3.4 Default

None

1.3.5 Usage Guidelines

Use this command to collect data when a problem or outage occurs at the customer node. Because the output of the command is intended for use by the support engineers, the output format might differ from typical `show` command output and might not be readable.

1.3.6 Examples

The following example shows output for the `show card adjacency` command:



```
[local]Ericsson#show card 10 adjacency
Slot 10:
Rib message count 5
Total dynamic adjacencies 9, add 9, delete 0
Total no adjacency drops 0
Circuit: 10/2:1023:63/1/1/8
  00000008: qeu 3, dma 0, queue 5, prec/queue map 0/0, MTU 1500
    NH-Grid 0x31100001
    Encap type ethernet, function ether_adj_ip_interface
  00f50001: qeu 3, dma 0, queue 5, prec/queue map 0/0, MTU 1500
    Encap type ethernet, function adj_phys_port
  00980004: qeu 3, dma 0, queue 5, prec/queue map 0/0, MTU 1500
    Encap type ethernet, function adj_enqueue
  00b80004: qeu 3, dma 0, queue 5, prec/queue map 0/0, MTU 1500
    Encap type ethernet, function ether_adj_ipv6_mcast
    ffffffff ffff0030 88036da2 encap_len 14
  00880004: qeu 3, dma 0, queue 5, prec/queue map 0/0, MTU 1500
    Encap type ethernet, function ether_adj_ip_mcast
    ffffffff ffff0030 88036da2 encap_len 14
  00800004: qeu 3, dma 0, queue 5, prec/queue map 0/0, MTU 1500
    Encap type ethernet, function ether_adj_ip_bcast
    ffffffff ffff0030 88036da2 encap_len 14
  00900004: qeu 3, dma 0, queue 5, prec/queue map 0/0, MTU 1500
    Encap type ethernet, function ether_adj_clnp
    00308803 6da2 encap_len 17
```

The following example shows output for the **show card adjacency brief** command:

```
[local]Ericsson#show card 10 adjacency brief
Slot 10:
Rib message count 5
Total dynamic adjacencies 9, add 9, delete 0
Total no adjacency drops 0
Circuit: 10/2:1023:63/1/1/8
  00000008: MTU 1500 ether_adj_ip_interface
  00f50001: MTU 1500 adj_phys_port
  00980004: MTU 1500 adj_enqueue
  00b80004: MTU 1500 ether_adj_ipv6_mcast
  00880004: MTU 1500 ether_adj_ip_mcast
  00800004: MTU 1500 ether_adj_ip_bcast
  00900004: MTU 1500 ether_adj_clnp
```

1.4 show card atm table

show card slot atm table

1.4.1 Purpose

Displays Asynchronous Transfer Mode (ATM) information for the specified card to show the ATM virtual circuit ID (VCID) to circuit mapping.

Warning!

Use the **show card atm table** command for debug purposes only to collect data when a problem or outage is seen at the customer node. Some **show card** commands might impact card performance.



1.4.2 Command Mode

All modes (10)

1.4.3 Syntax Description

slot | Chassis slot number of the traffic card.

1.4.4 Default

None

1.4.5 Usage Guidelines

Use this command to collect data when a problem or outage occurs at the customer node. Because the output of the command is intended for use by the support engineers, the output format might differ from typical `show` command output and might not be readable.

1.4.6 Example

The following example shows partial output for the `show card atm table` command:

```
[local]Ericsson#show card 4 atm table
[?1h = [KSlot 4:
VCHDL Circuit          VPI VCI Vcid      Rx pkts      Tx pkts
      Interface      State                Rx bytes      Tx bytes

Port 4/1:1
  4 4/1:1:63/1/2/8388608 1  32 00000015          0          0
                        up
  5 4/1:1:63/1/2/8388609 1  33 00000017          0          0
                        up
  6 4/1:1:63/1/2/8388610 1  34 00000019          0          0
                        up
  7 4/1:1:63/1/2/8388611 1  35 0000001b          0          0
                        up
  8 4/1:1:63/1/2/8388612 1  36 0000001d          0          0
                        up
  9 4/1:1:63/1/2/8388613 1  37 0000001f          0          0
                        up
 10 4/1:1:63/1/2/8388614 1  38 00000021          0          0
                        up

(continues...)
```

1.5 show card circuit

`show card slot circuit [detail]`



1.5.1 Purpose

Displays circuit information for the specified card.

Warning!

Use the `show card circuit` command for debug purposes only to collect data when a problem or outage is seen at the customer node. Some `show card` commands might impact card performance.

1.5.2 Command Mode

All modes (10)

1.5.3 Syntax Description

<i>slot</i>	Chassis slot number of the traffic card.
<i>detail</i>	Optional. Provides more detailed information.

1.5.4 Default

None

1.5.5 Usage Guidelines

Use this command to collect data when a problem or outage occurs at the customer node. Because the output of the command is intended for use by the support engineers, the output format might differ from typical `show` command output and might not be readable.

1.5.6 Examples

The following example shows partial output for the `show card circuit` command:



```
[local]Ericsson#show card 9 circuit
Slot 9:
  Circuit handle          State Admin Encap Name
I 9/1:1023:63/1/1/39    up    up    ethernet
E 9/1:1023:63/1/1/39    up    up    ethernet
I 9/1:1023:63/1/2/40    up    up    dot1q to-core
E 9/1:1023:63/1/2/40    up    up    dot1q to-core
I 9/1:1023:63/1/2/41    up    up    dot1q lns
E 9/1:1023:63/1/2/41    up    up    dot1q lns
I 9/1:1023:63/1/2/42    up    up    dot1q l2tp-tunnel
E 9/1:1023:63/1/2/42    up    up    dot1q l2tp-tunnel
I 9/1:1023:63/1/2/43    up    up    dot1q l2tp-tunnel
E 9/1:1023:63/1/2/43    up    up    dot1q l2tp-tunnel
I 9/1:1023:63/1/2/44    up    up    dot1q l2tp-tunnel
E 9/1:1023:63/1/2/44    up    up    dot1q l2tp-tunnel
I 9/1:1023:63/1/2/45    up    up    dot1q l2tp-tunnel
E 9/1:1023:63/1/2/45    up    up    dot1q l2tp-tunnel
I 9/1:1023:63/1/2/46    up    up    dot1q l2tp-tunnel
E 9/1:1023:63/1/2/46    up    up    dot1q l2tp-tunnel
I 255/6:5:18/1/1/17    up    up    ethernet
E 255/6:5:18/1/1/17    up    up    ethernet

(continues...)
```

The following example shows partial output for the **show card circuit detail** command:

```
[local]Ericsson#show card 9 circuit detail
Slot 9:
  Circuit 9/1:1023:63/1/1/39 ingress is up, admin up
    Ver 421961, ref 4, mtu 1700, ipv6 mtu 1700, mss 0, flags 0x00000013,0x00000000 encap ethernet
    Spg id 0, Global cct index 19
    Pseudo sub virtual L3 id 0 cct_fwd_mode: 0
    Traffic drop flags 0, block 0
  Parent circuit 9/1:1023:63/1/0/38
    Configured grid 30000001 eth-rx, first grid 30000001 eth-rx
    Service sync/config flags 00000000/00000000
    Deferred packets dropped 0, sub aaa index 0
    Features: ped_graph linkgroup

  Circuit 9/1:1023:63/1/1/39 egress is up, admin up
    Ver 421961, ref 5, mtu 1700, ipv6 mtu 1700, mss 0, flags 0x00000013,0x00000000 encap ethernet
    Spg id 0, Global cct index 19
    Pseudo sub virtual L3 id 0 cct_fwd_mode: 0
    Traffic drop flags 0, block 0
  Parent circuit 9/1:1023:63/1/0/38
    Configured grid 3000005a egress-root, first grid 3000005a egress-root
    Service sync/config flags 00000000/00000000
    Deferred packets dropped 0, sub aaa index 0
    Features: ped_graph linkgroup adjacency

(continues...)
```

1.6 show card clips

show card slot clips

1.6.1 Purpose

Displays clientless IP service selection (CLIPS) information for the specified card.



Warning!

Use the **show card clips** command for debug purposes only to collect data when a problem or outage is seen at the customer node. Some **show card** commands might impact card performance.

1.6.2 Command Mode

All modes (10)

1.6.3 Syntax Description

<i>slot</i>		Chassis slot number of the traffic card.
-------------	--	--

1.6.4 Default

None

1.6.5 Usage Guidelines

Use this command to collect data when a problem or outage occurs at the customer node. Because the output of the command is intended for use by the support engineers, the output format might differ from typical **show** command output and might not be readable.

1.6.6 Example

The following example shows output for the **show card clips** command:

```
[local]Ericsson#show card 10 clips
Slot 10 Ingress
101.8.0.2, 10/1:511:63:31/1/2/13 -> 10/1:511:63:31/7/2/1

[local]KIWI#sh card 10 dot1q table
num entries 1
Slot 10:
802.1Q vlan id to circuit mapping table
KEY: CM-Idx - Qos Class Map Index (from/to) | Flags - 8 bit vlan flags (in/eg)
VLAN Flags:
DOT1Q_QOS_FROM_ETH          0x1
DOT1Q_QOS_TO_ETH            0x2
DOT1Q_QOS_OUTER_VLAN_TO_ETH 0x4
DOT1Q_QOS_OUTER_VLAN_FROM_ETH 0x8
DOT1Q_QOS_FROM_ETH_TU_OUTER 0x10
DOT1Q_QOS_TO_ETH_TU_OUTER   0x20
DOT1Q_QOS_ANY_RANGE         0x40

Vlan      Circuit      State Flags Rx-Pkts      Tx-Pkts      CM-Idx  Iface
1001      10/1:511:63:31/1/2/13 up    00/00 15          6           0 /0
```



1.7 show card dot1q table

`show card slot dot1q table`

1.7.1 Purpose

Displays 802.1Q information for the specified card to show 802.1Q virtual LAN (VLAN) ID to circuit mapping.

Warning!

Use the `show card dot1q table` command for debug purposes only to collect data when a problem or outage is seen at the customer node. Some `show card` commands might impact card performance.

1.7.2 Command Mode

All modes (10)

1.7.3 Syntax Description

<code>slot</code>	Chassis slot number of the traffic card.
-------------------	--

1.7.4 Default

None

1.7.5 Usage Guidelines

Use this command to collect data when a problem or outage occurs at the customer node. Because the output of the command is intended for use by the support engineers, the output format might differ from typical `show` command output and might not be readable.

1.7.6 Example

The following example shows output for the `show card dot1q table` command:



```
[local]Ericsson#show card 10 dot1q table
num entries 1
Slot 10:
802.1Q vlan id to circuit mapping table
KEY: CM-Idx - Qos Class Map Index (from/to) | Flags - 8 bit vlan flags (in/eg)
VLAN Flags:
DOT1Q_QOS_FROM_ETH          0x1
DOT1Q_QOS_TO_ETH            0x2
DOT1Q_QOS_OUTER_VLAN_TO_ETH 0x4
DOT1Q_QOS_OUTER_VLAN_FROM_ETH 0x8
DOT1Q_QOS_FROM_ETH_TU_OUTER 0x10
DOT1Q_QOS_TO_ETH_TU_OUTER   0x20
DOT1Q_QOS_ANY_RANGE         0x40

Vlan      Circuit      State Flags Rx-Pkts      Tx-Pkts      CM-Idx  Iface
1001      10/1:511:63:31/1/2/13 up    00/00 15          6            0 /0
```

1.8 show card fib

```
show card slot fib [log|summary|ip-addr [prefix
[longer-prefixes|short-prefixes]]]
```

1.8.1 Purpose

Displays Forwarding Information Base (FIB) information for the specified card.

Warning!

Use the `show card fib` command for debug purposes only to collect data when a problem or outage is seen at the customer node. Some `show card` commands might impact card performance.

1.8.2 Command Mode

All modes (10)

1.8.3 Syntax Description

<i>slot</i>	Chassis slot number of the traffic card.
<i>log</i>	Optional. Displays updated FIB log information.
<i>summary</i>	Optional. Displays a statistical summary of the FIB log.
<i>ip-addr</i>	Optional. Displays the longest match route entry for the specified interface.
<i>prefix</i>	Optional. Displays the exact match route entry for the specified interface and prefix.



longer-prefixes	Optional. Displays all routes that are greater than the one matching the specified interface and prefix.
short-prefixes	Optional. Displays all routes that are shorter than the one matching the specified interface and prefix.

1.8.4 Default

None

1.8.5 Usage Guidelines

Use this command to collect data when a problem or outage occurs at the customer node. Because the output of the command is intended for use by the support engineers, the output format might differ from typical **show** command output and might not be readable.

1.8.6 Examples

The following example shows output for the **show card fib** command:

```
[local]Ericsson#show card 10 fib
Slot 10:
Routes:
  Total 11
  Adds 12, Deletes 0, Updates 0
Nexthops:
  Total 3
  Connected 3, Recursive 0, Label-recursive 0, Feature-recursive 0
  Multi-path 0, Aggregate 0
Total memory 2163656 bytes
All contexts:
  Rib message count 12
  Null0 drop bytes: 0  packets: 0

Slot 10:
Prefix          Next Hop          Interface          Next Hop Grid
0.0.0.0/32      0.0.0.0           0.0.0.0            0x30d00002
10.0.0.0/8      10.13.183.254    10.13.183.254     0x35700002
10.13.176.0/21  0.0.0.0           0.0.0.0            0x35700001
10.13.176.0/32  0.0.0.0           0.0.0.0            0x31d00001
10.13.176.83/32 0.0.0.0           0.0.0.0            0x31d00001
10.13.183.254/32 10.13.183.254    10.13.183.254     0x35700002
10.13.183.255/32 0.0.0.0           0.0.0.0            0x31d00001
155.0.0.0/8     10.13.183.254    10.13.183.254     0x35700002
224.0.0.0/4     0.0.0.0           0.0.0.0            0x31400001
224.0.0.0/24    0.0.0.0           0.0.0.0            0x30d00002
255.255.255.255/32 0.0.0.0          0.0.0.0            0x30d00002
```

The following example shows partial output for the **show card fib log** command:



```
[local]Ericsson#show card 10 fib log
Slot 10:
A - Add D - Delete U - Update S - Delete stale
Last updated entry index: 33
Idx Op Prefix Leaf Result NH-Grid Context
0 A 0.0.0.0/0 4eb7b900 60127286 30500001 40080001
1 A 255.255.255.255/32 5eb7b900 60127306 30d00002 40080001
2 A 0.0.0.0/32 6eb7b900 60127306 30d00002 40080001
3 A 224.0.0.0/4 7eb7b900 60127386 31400001 40080001
4 A 224.0.0.0/24 4eb7b920 60127306 30d00002 40080001
5 A ::/0 4eaf4ea0 60127406 30500003 40080001
6 A ff02::/120 5eaf4ea0 60127486 30d00003 40080001
7 A ff02::1:ff00:0/104 6eaf4ea0 60127486 30d00003 40080001
8 A fe80::/64 7eaf4ea0 60127506 30d00004 40080001
9 A 0.0.0.0/0 5eb7b920 60127286 30500001 40080002
10 A 255.255.255.255/32 6eb7b920 60127306 30d00002 40080002

(continues...)
```

The following example shows output for the `show card fib summary` command:

```
[local]Ericsson#show card 10 fib summary
Slot 10:
Routes:
  Total 11
  Adds 12, Deletes 0, Updates 0
Nexthops:
  Total 3
  Connected 3, Recursive 0, Label-recursive 0, Feature-recursive 0
  Multi-path 0, Aggregate 0
Total memory 2163656 bytes
All contexts:
  Rib message count 12
  Null0 drop bytes: 0 packets: 0
```

1.9 show card ism

```
show card slot ism {log|statistics}
```

1.9.1 Purpose

Displays Interface and Circuit State Manager (ISM) information for the specified card.

Warning!

Use the `show card ism` command for debug purposes only to collect data when a problem or outage is seen at the customer node. Some `show card` commands might impact card performance.

1.9.2 Command Mode

All modes (10)



1.9.3 Syntax Description

<i>slot</i>	Chassis slot number of the traffic card.
<i>log</i>	Displays ISM event log information.
<i>statistics</i>	Displays ISM event statistics information.

1.9.4 Default

None

1.9.5 Usage Guidelines

Use this command to collect data when a problem or outage occurs at the customer node. Because the output of the command is intended for use by the support engineers, the output format might differ from typical **show** command output and might not be readable.

1.9.6 Examples

The following example shows partial output for the **show card ism log** command:

```
[local]Ericsson#show card 9 ism log
Slot 9 Ingress:
Last updated entry index: 5804
Idx  HdrId SubId Len Data
0      6      17 576 CCT cfg      CCT l2tpcfg      255/16:1023:63/5/2/777
1      6      17 576 CCT cfg      CCT l2tpcfg      255/16:1023:63/5/2/785
2      c      6 524 L2TP scfg      CCT l2tp sesscfg 255/16:1023:63/5/2/791
3      5      4 96 CCT state      CCT del          255/16:1023:63/5/2/791
4      c      6 524 L2TP scfg      CCT l2tp sesscfg 255/16:1023:63/5/2/793
5      5      4 96 CCT state      CCT del          255/16:1023:63/5/2/793
6      c      6 524 L2TP scfg      CCT l2tp sesscfg 255/16:1023:63/5/2/795
7      5      4 96 CCT state      CCT del          255/16:1023:63/5/2/795
8      6      17 576 CCT cfg      CCT l2tpcfg      255/16:1023:63/5/2/797
9      6      17 576 CCT cfg      CCT l2tpcfg      255/16:1023:63/5/2/799
10     c      6 524 L2TP scfg      CCT l2tp sesscfg 255/16:1023:63/5/2/803
```

(continues...)

The following example shows partial output for the **show card ism statistics** command:



```
[local]Ericsson#show card 9 ism statistics
Slot 9 Ingress:

ISM Statistics:
Total events: rcvd: 108204, err 0, unknown 18920

ID: I/F    : state 19164, cfg 15570, IP cfg 23,
Cct       : state 32004, Cct cfg 13002 Cct grp 0
Port      : state 2210, Port cfg 1
Hdr       : only 0          GrpMac: cfg 0
L2TP      : sess cfg 7280
Card      : state 30

CCT SUBID: down 8848, up 19500, create 1836, del 1820, par_up 0
CFG: eth 2699, ocn 0, lq 14, tun 0, fr 0
    ppp 0 atm 0 l2tp 10289 cfg 0
GRP: join 0, leave 0

I/F SUBID: down 7736, up 7751, create 23, del 0, bind 1834, unbind 1820
CFG: cfg 15570, ipcfg 23

PORT SUBID: down 1105, up 1105, del 0
CFG: eth 1, stsn 0

GRPMAC: UCAST: reg 0, dereg 0
        MCAST: reg 0, dereg 0

L2TP: Sess CFG: 7280

CARD: create: 7, delete 0, up 6, down 2, mic 0, unknown 15

(continues...)
```

1.10 show card link-group

```
show card slot link-group [spg-table [spg-id]]
```

1.10.1 Purpose

Displays link group information for the specified card.

Warning!

Use the **show card link-group** command for debug purposes only to collect data when a problem or outage is seen at the customer node. Some **show card** commands might impact card performance.

1.10.2 Command Mode

All modes (10)



1.10.3 Syntax Description

<i>slot</i>	Chassis slot number of the traffic card.
<i>spg-table</i>	Optional. Displays sub-protection link group table information.
<i>spg-id</i>	Optional. Limits the display to a specific link group table.

1.10.4 Default

None

1.10.5 Usage Guidelines

Use this command to collect data when a problem or outage occurs at the customer node. Because the output of the command is intended for use by the support engineers, the output format might differ from typical **show** command output and might not be readable.

1.10.6 Examples

The following example shows partial output for the **show card link-group** command:

```
[local]Ericsson#show card 10 link-group
Slot 9 Ingress:
  Constituent circuit: 10/2:1023:63/1/1/8
  => aggregate circuit: 255/6:5:18/1/1/9

Slot 255 Ingress:
  Aggregate load-share circuit: 255/6:5:18/1/1/9
  Link Group id: 273
  Constituent circuits:
    10/2:1023:63/1/1/8
  Number of active constituent circuits: 1
    Active constituent circuit global_cct_index
    10/2:1023:63/1/1/8          4

Slot 9 Egress:
  Constituent circuit: 10/2:1023:63/1/1/8
  => aggregate circuit: 255/6:5:18/1/1/9

Slot 255 Egress:
  Aggregate load-share circuit: 255/6:5:18/1/1/9
  Link Group id: 273
  Constituent circuits:
    10/2:1023:63/1/1/8
  Number of active constituent circuits: 1
    Active constituent circuit global_cct_index
    10/2:1023:63/1/1/8          4

(continues...)
```

The following example shows output for the **show card link-group spg-table** command:



```
[local]Ericsson#show card 9 link-group spg-table 5
lot 9 Ingress:
Sub-protection group: 5 (Entry: Valid, Active in this slot)
  LG id      : 0          Flags      : 0x05  Active      : 9/1      Phy adj      : 0x0898000
lot 9 Egress:
Sub-protection group: 5 (Entry: Valid, Active in this slot, Phy adj ptr valid)
  LG id      : 0          Flags      : 0x0d  Active      : 9/1      Phy adj      : 0xd6c5b34
```

1.11 show card mpls

```
show card slot mpls {12vpn|lfib [space-id] |lm log|lm
statistics}
```

1.11.1 Purpose

Displays Multiprotocol Label Switching (MPLS) information for the specified card.

Warning!

Use the `show card mpls` command for debug purposes only to collect data when a problem or outage is seen at the customer node. Some `show card` commands might impact card performance.

1.11.2 Command Mode

All modes (10)

1.11.3 Syntax Description

<i>slot</i>	Chassis slot number of the traffic card.
<i>12vpn</i>	Displays MPLS Layer 2 VPN information.
<i>lfib</i>	Displays MPLS label FIB information.
<i>space-id</i>	Optional. Limits output to match the specified space ID.
<i>lm log</i>	Displays the events log for the MPLS label manager.
<i>lm statistics</i>	Displays the events statistics for the MPLS label manager.

1.11.4 Default

None



1.11.5 Usage Guidelines

Use this command to collect data when a problem or outage occurs at the customer node. Because the output of the command is intended for use by the support engineers, the output format might differ from typical **show** command output and might not be readable.

1.11.6 Examples

The following example shows output for the **show card mpls lfib** command:

```
[local]Ericsson#show card 1 mpls lfib
Slot 1:
Label fib entries:
  Total 3
  Stale entries 0
  Swap 0, pop 2, push 0, php 1, swap-push 0, swap-php 0, drop 0
  Total memory 197596 bytes
Slot 1:
Space ID: 0x0
In Label  Adjacency-ID  Action
0          0x00000000    pop
524292    0x01300010    php
589824    0x00000000    pop
```

The following example shows output for the **show card mpls lm log** command:

```
[local]Ericsson#show card 1 mpls lm log
Slot 1 Ingress:
Last updated entry index: 2
Idx  Type Len Data
0    1  88 LBS upd 0 pop adj 0x0 ctx 0x40080001 spc 0
      m_nh_cct: Cct invalid
      ver 0 trgt ctx 0x40080001 update flags 0x400 byp op 0 trgt afi 1
      m_dcnh_ip 0.0.0.0
1    1  88 LBS upd 524292 php adj 0x1300010 ctx 0x40080001 spc 0
      m_nh_cct: 2/1:1023:63/1/1/71
      ver 1 trgt ctx 0x0 update flags 0 byp op 0 trgt afi 0
      m_dcnh_ip 195.190.242.132
2*   1  88 LBS upd 589824 pop adj 0x0 ctx 0x40080001 spc 0
      m_nh_cct: Cct invalid
      ver 0 trgt ctx 0x40080014 update flags 0x400 byp op 0 trgt afi 1
      m_dcnh_ip 0.0.0.0
Slot 1 Egress:
Last updated entry index: 0
Idx  Type Len Data
```

The following example shows output for the **show card mpls lm statistics** command:



```
[local]Ericsson#show card 1 mpls lm statistics
[local]se1200-017-KPN#
Slot 1 Ingress:
LM Statistics:
  Total events: rcvd: 3, unknown 0
  Type: Lbs upd 3, del 0
        Cct upd 0, del 0
        Adj upd 0, del 0
Slot 1 Egress:
LM Statistics:
  Total events: rcvd: 0, unknown 0
  Type: Lbs upd 0, del 0
        Cct upd 0, del 0
        Adj upd 0, del 0
```

1.12 show card nat

`show card slot nat {counters|drop-counters|log}`

1.12.1 Purpose

Displays Network Address Translation (NAT) information for the specified card.

Warning!

Use the `show card nat` command for debug purposes only to collect data when a problem or outage is seen at the customer node. Some `show card` commands might impact card performance.

1.12.2 Command Mode

All modes (10)

1.12.3 Syntax Description

<i>slot</i>	Chassis slot number of the traffic card.
<i>counters</i>	Displays NAT counter information (without drop counters).
<i>drop-counter s</i>	Displays NAT drop counter information.
<i>log</i>	Displays NAT message log information.

1.12.4 Default

None



1.12.5 Usage Guidelines

Use this command to collect data when a problem or outage occurs at the customer node. Because the output of the command is intended for use by the support engineers, the output format might differ from typical **show** command output and might not be readable.

1.12.6 Examples

The following example shows output for the **show card nat drop-counters** command:

```
[local]Ericsson#show card 1 nat drop-counters
Slot 1, Ingress:
```

Outbound Packets Dropped		Return Packets Dropped	
Entry allocation failed	0	NAT invalid state	0
Bucket allocation failed	0	NAPT invalid state	0
NAPT invalid state	0	Protocol mismatch	0
NAPT IP mismatch	0	Invalid ager	0
NAT invalid state	0	IP mismatch	0
NAT IP mismatch	0	No entry	0
NAPT invalid TCP state	0	NAPT unsupported protocol	0
NAPT unsupported protocol	0	Null context block	0
Class Action DROP	0	Null fib	0
Invalid ager	0	Null return hash	0
Null context block	0	Remote IP mismatch	30
Null fib	0	NAPT fragmented packets	0
Source IP 0.0.0.0	0	NAPT dst nat packets	0
NAPT fragmented packets	0		
NAPT internal error	0		
NAPT CAC packets	0		
ICMP Packets Dropped		Return ICMP Packets Dropped	
Missing interface feature	0	Invalid entry IP	0
Missing interface IP	0	Invalid entry state	0
Missing rx circuit	0	Protocol mismatch	0
Invalid entry	0	No entry	0

The following example shows output for the **show card nat log** command:

Index	Hdrid	Subid	Len	Data
0	4	1	24	bind add policy 1179649 cct 255/22:1:26/6/2/10780
1	4	1	24	bind add policy 1179649 cct 255/22:1:26/6/2/10781
2	4	1	24	bind add policy 1179649 cct 255/22:1:26/6/2/10782
3	4	1	24	bind add policy 1179649 cct 255/22:1:26/6/2/10783
4	4	1	24	bind add policy 1179649 cct 255/22:1:26/6/2/10784
5	4	1	24	bind add policy 1179649 cct 255/22:1:26/6/2/10785
6	4	1	24	bind add policy 1179649 cct 255/22:1:26/6/2/10786
7	4	1	24	bind add policy 1179649 cct 255/22:1:26/6/2/10787
8	4	1	24	bind add policy 1179649 cct 255/22:1:26/6/2/10788
9	4	1	24	bind add policy 1179649 cct 255/22:1:26/6/2/10760
10	4	1	24	bind add policy 1179649 cct 255/22:1:26/6/2/10789
11	4	1	24	bind add policy 1179649 cct 255/22:1:26/6/2/10790
12	4	1	24	bind add policy 1179649 cct 255/22:1:26/6/2/10791
13	4	1	24	bind add policy 1179649 cct 255/22:1:26/6/2/10792
14	4	1	24	bind add policy 1179649 cct 255/22:1:26/6/2/10793
15	4	1	24	bind add policy 1179649 cct 255/22:1:26/6/2/10794
16	4	1	24	bind add policy 1179649 cct 255/22:1:26/6/2/10795
17	4	1	24	bind add policy 1179649 cct 255/22:1:26/6/2/10796
18	4	1	24	bind add policy 1179649 cct 255/22:1:26/6/2/10797

The following example shows partial output for the `show card nat log detail` command:



```
[local]Ericson#show card 10 nat log detail
Slot 2 Ingress:
Last updated entry index: 17
Index  HdrId Subid Len Data
0      3      1 3092 pool      add      pool 4 ctx 0x40080004 records 256
                                         flag 2
1      3      1  32 pool      add      pool 3 ctx 0x40080004 records 1
                                         flag 10
2      3      1  32 pool      add      pool 1 ctx 0x40080004 records 1
                                         flag 2
3      3      1  32 pool      add      pool 2 ctx 0x40080004 records 1
                                         flag 1
4      1      1 460 policy    add      grid 1 ctx 0x40080004
                                         admit max: tcp 0, udp 10, icmp 0
                                         default class: pool, flags 100
                                         grid 4 ctx 0x40080004
                                         tcp 86400, udp 100, fin 240,
                                         icmp 60, syn 128, basic 3600
                                         class id 1: pool, flags 100
                                         grid 4 ctx 0x40080004
                                         tcp 86400, udp 120, fin 240,
                                         icmp 60, syn 128, basic 3600
                                         class id 2: drop, flags 200
                                         class id 3: pool, flags 100
                                         grid 4 ctx 0x40080004
                                         tcp 86400, udp 120, fin 240,
                                         icmp 60, syn 128, basic 3600
                                         class id 4: pool, admit mask 0x2, flags 100
                                         grid 3 ctx 0x40080004
                                         dest ip addr 42.1.1.2 ctx 0x40080004
                                         tcp 86400, udp 120, fin 240,
                                         icmp 60, syn 128, basic 3600
                                         class id 5: drop, flags 200
                                         class id 6: pool, flags 100
                                         grid 4 ctx 0x40080004
                                         tcp 86400, udp 120, fin 240,
                                         icmp 60, syn 128, basic 3600
                                         class id 7: pool, admit mask 0x2, flags 100
                                         grid 1 ctx 0x40080004
                                         tcp 86400, udp 120, fin 240,
                                         icmp 60, syn 128, basic 3600
                                         class id 8: pool, flags 100
                                         grid 2 ctx 0x40080004
                                         tcp 86400, udp 120, fin 240,
                                         icmp 60, syn 128, basic 3600
5      2      1  44 static    add      policy 1 ctx 0x40080004 rules 1
                                         rule dmz, 11.1.1.3:0 -> 111.1.1.3:0
(continues)
```

1.13 show card packet local statistics

show card slot packet local statistics

1.13.1 Purpose

Displays local packet statistics information for the specified card.



Warning!

Use the `show card packet local statistics` command for debug purposes only to collect data when a problem or outage is seen at the customer node. Some `show card` commands might impact card performance.

1.13.2 Command Mode

All modes (10)

1.13.3 Syntax Description

<i>slot</i>	Chassis slot number of the traffic card.
-------------	--

1.13.4 Default

None

1.13.5 Usage Guidelines

Use this command to collect data when a problem or outage occurs at the customer node. Because the output of the command is intended for use by the support engineers, the output format might differ from typical `show` command output and might not be readable.

1.13.6 Example

The following example shows partial output for the `show card packet local statistics` command:



```
[local]Ericsson#show card 9 packet local statistics
Slot 9 Ingress:
  Packet header pool
    Free 6144  Alloc failures 0
    Min pool size 6132  Max pool size 6144
    Pool grows 0  Pool shrinks 0
  EPPA to IPPA loopback received count 6226, drop 0
  Packet drop for
    bad ip len 0 bytes 0
    bad ip version 0 bytes 0
    bad checksum 0 bytes 0
    napt unreach 0 bytes 0          bad ipv6 version 0 bytes 0
    link broadcast 0 bytes 0
  BSD sourced packets:
    Received 19676 (21565) MDU alloc errors 0 pak header alloc errors 0
    Invalid circuit 0 invalid pak hdr 0 invalid proto 0
    Destination unreachable 0
    Cct deferred packets in the queue 0
    Total cct packet deferred 0; sent 0
    Total cct packet deferred dropped 0; replaced 0
    Cct deferred min wait 4294967295 msecs, max wait 0 msecs
    Cct deferred total wait 0 msecs
  Background to foreground send queue:
    Sent 23556752  Queue full errors 0
    Queue selected packet drops 0

(continues...)
```

1.14 show card pbr

show card pbr slot {policy | circuit} [detail]

1.14.1 Purpose

Displays policy or circuit information for the specified card.

1.14.2 Command Mode

All modes (10)

1.14.3 Syntax Description

<i>slot</i>	Chassis slot number of the traffic card.
<i>policy</i>	Displays card policy data.
<i>circuit</i>	Displays card circuit data.
<i>detail</i>	Optional. Displays detailed output information.

1.14.4 Default

None



1.14.5 Usage Guidelines

Use this command to display policy or circuit data for a specified card.

1.14.6 Examples

The following example shows output for the **show card pbr policy** command:

```
[local]Ericsson(config)#show card 2 pbr policy 2 detail
Slot 2 Ingress:
  Policy utest, grid 0x2, addr 0xe06653c0, ref 1, acl required ipv4 ipv6

  Class 0, action 1, mode 0x110 (redirect-to-hop4-hop6)
    context 0, slot unique id 0, portal id 0, sample int 0
    Next ipv4 hops: 2.5.0.2
    Next ipv6 hops: 2:5::2 ::

  Class 2, action 1, mode 0x100 (redirect-to-hop6)
    context 0, slot unique id 0, portal id 0, sample int 0
    Next ipv6 hops: 2:4::6 ::

  Class 3, action 4, mode 0x0 (drop)
    context 0, slot unique id 0, portal id 0, sample int 0

  Class 4, action 1, mode 0x100 (redirect-to-hop6)
    context 0, slot unique id 0, portal id 0, sample int 0
    Next ipv6 hops: 2:4::2 ::

  Class 5, action 1, mode 0x100 (redirect-to-hop6)
    context 0, slot unique id 0, portal id 0, sample int 0
    Next ipv6 hops: 2:4::9 ::

  Class 6, action 1, mode 0x100 (redirect-to-hop6)
    context 0, slot unique id 0, portal id 0, sample int 0
    Next ipv6 hops: 2:4::10 ::

  Class 7, action 1, mode 0x100 (redirect-to-hop6)
    context 0, slot unique id 0, portal id 0, sample int 0
    Next ipv6 hops: 2:4::11 ::

  Class 8, action 1, mode 0x10 (redirect-to-hop4)
    context 0, slot unique id 0, portal id 0, sample int 0
    Next ipv4 hops: 2.4.0.6

  Circuit 2/2:511:63:31/1/2/4 (0xe06657e0), dropped bytes: 1960, pkts: 18
```

The following example shows output for the **show card pbr circuit** command:



```
[local]Ericsson(config)#show card 2 pbr circuit 2/2:511:63:31/1/2/4
Circuit 2/2:511:63:31/1/2/4 (0xe06657e0), ingress (L3)
Policy utest, grid 0x2
  Class 0, redirect-to-hop4, index 0, addr 2.5.0.2
    Next ipv4 hops: 2.5.0.2
    redirect-to-hop6, index 0, addr 2:5::2
    Next ipv6 hops: 2:5::2 ::
  Class 2, redirect-to-hop6, index 0, addr 2:4::6
    Next ipv6 hops: 2:4::6 ::
  Class 3, drop
  Class 4, redirect-to-hop6, index 0, addr 2:4::2
    Next ipv6 hops: 2:4::2 ::
  Class 5, redirect-to-hop6, index 0, addr 2:4::9
    Next ipv6 hops: 2:4::9 ::
  Class 6, redirect-to-hop6, index 0, addr 2:4::10
    Next ipv6 hops: 2:4::10 ::
  Class 7, redirect-to-hop6, index 0, addr 2:4::11
    Next ipv6 hops: 2:4::11 ::
  Class 8, redirect-to-hop4, index 0, addr 2.4.0.6
    Next ipv4 hops: 2.4.0.6
Bytes Dropped: 1960  Pkts Dropped : 18
Ped Sum: 0x8  Installed Ped Sum: 0x8
```

1.15 show card port

show card slot port [port-id|summary]

1.15.1 Purpose

Displays port information for the specified card.

Warning!

Use the **show card port** command for debug purposes only to collect data when a problem or outage is seen at the customer node. Some **show card** commands might impact card performance.

1.15.2 Command Mode

All modes (10)

1.15.3 Syntax Description

<i>slot</i>	Chassis slot number of the traffic card.
<i>port-id</i>	Optional. Filters output for the specified port ID.
<i>summary</i>	Optional. Limits output to summary information.



1.15.4 Default

None

1.15.5 Usage Guidelines

Use this command to collect data when a problem or outage occurs at the customer node. Because the output of the command is intended for use by the support engineers, the output format might differ from typical `show` command output and might not be readable.

1.15.6 Examples

The following example shows output for the `show card port` command:

```
[local]Ericsson#show card 9 port
Slot 9:
  Port 1 type ether (rx_eth_port) DMA port 255, channel 16
    Ingress version 421876 flags 0x317, is up, carrier up, admin up
    Egress version 421876 flags 0x317, is up, carrier up, admin up
    MAC address 00:30:88:13:ab:37 outer vlan tpid 0x8100 pppoe map 0xc17ba4a4
    Link-Group MAC address 02:01:11:22:52:43
```

The following example shows output for the `show card port summary` command:

```
[local]Ericsson#show card 9 port summary
Slot 9:
  Port      State Carrier Admin Type Rx
I 1         up      up      up      ether rx_eth_port
E 1         up      up      up      ether
```

1.16 show card ppp

`show card slot ppp [all-context | log]`

1.16.1 Purpose

Displays Point-to-Point Protocol (PPP) session information for the specified card.

Warning!

Use the `show card ppp` command for debug purposes only to collect data when a problem or outage is seen at the customer node. Some `show card` commands might impact card performance.



1.16.2 Command Mode

All modes (10)

1.16.3 Syntax Description

<i>slot</i>	Chassis slot number of the traffic card.
<i>all-context</i>	Optional. Displays PPP information for all contexts.
<i>log</i>	Optional. Displays PPP log events.

1.16.4 Default

None

1.16.5 Usage Guidelines

Use this command to collect data when a problem or outage occurs at the customer node. Because the output of the command is intended for use by the support engineers, the output format might differ from typical **show** command output and might not be readable.

1.16.6 Examples

The following example shows output for the **show card ppp** command:

```
[local]Ericsson#show card 10 ppp
Slot 10: received: bytes 100, packets 10,
            unsupported packets 0, dropped 0
            bad magic 0, bad len 0, limit drop 0
            sent: bytes 100, packets 10
LCP echo request      : received 0, sent 10, dropped 0,
LCP echo response     : received 10, sent 0, dropped 0,
LCP protocol reject   : received 0, sent 0, dropped 0,
```

The following example shows output for the **show card ppp all-context** command:

```
[local]Ericsson#show card 10 ppp all-context
Context   :local                               Context id   : 0x40080001
-----
Slot 10: received: bytes 100, packets 10,
            unsupported packets 0, dropped 0
            bad magic 0, bad len 0, limit drop 0
            sent: bytes 100, packets 10
LCP echo request      : received 0, sent 10, dropped 0,
LCP echo response     : received 10, sent 0, dropped 0,
LCP protocol reject   : received 0, sent 0, dropped 0,
Context   :lcoal                               Context id   : 0x40080002
```

The following example shows output for the **show card ppp log** command:



```
[local]Ericsson#show card 10 ppp log
Slot 10 Ingress:
Last updated entry index: 11
Idx  HdrId Subid Len Data
0      1      0  88 PPP PPA REG endpoint: PPP SLOT 10/0
1      4      0   8 PPP CTX EOF
2      6      0  20 PPP Drop Ctrl cct 10/1:511:63:31/6/2/1
3      6      0  20 PPP Drop Ctrl cct 10/1:511:63:31/6/2/2
4      6      0  20 PPP Drop Ctrl cct 10/1:511:63:31/6/2/3
5      6      0  20 PPP Drop Ctrl cct 10/1:511:63:31/6/2/4
6      6      0  20 PPP Drop Ctrl cct 10/1:511:63:31/6/2/5
7      6      0  20 PPP Drop Ctrl cct 10/1:511:63:31/6/2/6
8      6      0  20 PPP Drop Ctrl cct 10/1:511:63:31/6/2/7
9      6      0  20 PPP Drop Ctrl cct 10/1:511:63:31/6/2/8
10     6      0  20 PPP Drop Ctrl cct 10/1:511:63:31/6/2/9
11*    6      0  20 PPP Drop Ctrl cct 10/1:511:63:31/6/2/10
```

1.17 show card pppoe

`show card slot pppoe {table|session-id|table session-id}`

1.17.1 Purpose

Displays PPP over Ethernet (PPPoE) information for the specified card.

Warning!

Use the `show card pppoe` command for debug purposes only to collect data when a problem or outage is seen at the customer node. Some `show card` commands might impact card performance.

1.17.2 Command Mode

All modes (10)

1.17.3 Syntax Description

<i>slot</i>	Chassis slot number of the traffic card.
<i>table</i>	Displays PPPoE table information.
<i>session-id</i>	Displays PPPoE information for the specified session ID.
<i>table session-id</i>	Displays PPPoE table information starting at the specified session ID.



1.17.4 Default

None

1.17.5 Usage Guidelines

Use this command to collect data when a problem or outage occurs at the customer node. Because the output of the command is intended for use by the support engineers, the output format might differ from typical `show` command output and might not be readable.

1.17.6 Example

The following example shows partial output for the `show card pppoe table` command:

```
[local]Ericsson#show card 1 pppoe table
Slot 1, Ingress, Session-map table 0
1. 1/3:1023:63/1/2/63 -> 1/3:1023:63/6/2/136525
2. 1/3:1023:63/1/2/63 -> 1/3:1023:63/6/2/136526
3. 1/3:1023:63/1/2/63 -> 1/3:1023:63/6/2/136527
4. 1/3:1023:63/1/2/63 -> 1/3:1023:63/6/2/136528
5. 1/3:1023:63/1/2/63 -> 1/3:1023:63/6/2/136529
6. 1/3:1023:63/1/2/63 -> 1/3:1023:63/6/2/136530
7. 1/3:1023:63/1/2/63 -> 1/3:1023:63/6/2/136531
8. 1/3:1023:63/1/2/63 -> 1/3:1023:63/6/2/136532
9. 1/3:1023:63/1/2/63 -> 1/3:1023:63/6/2/136533
10. 1/3:1023:63/1/2/63 -> 1/3:1023:63/6/2/136534

(continues...)
```

1.18 show card qos

```
show card slot qos {log|statistics} [detail]
```

1.18.1 Purpose

Displays quality of service (QoS) information for the specified card.

Warning!

Use the `show card qos` command for debug purposes only to collect data when a problem or outage is seen at the customer node. The `show card` commands might impact card performance.

1.18.2 Command Mode

All modes (10)



1.18.3 Syntax Description

<i>slot</i>	Chassis slot number of the traffic card.
<i>log</i>	Displays QoS event log information.
<i>statistics</i>	Displays QoS event statistics information.
<i>detail</i>	Displays additional detailed information.

1.18.4 Default

None

1.18.5 Usage Guidelines

Use this command to collect data when a problem or outage occurs at the customer node. Because the output of the command is intended for use by the support engineers, the output format might differ from typical **show** command output and might not be readable.

1.18.6 Examples

The following example shows output for the **show card qos log** command:

```
[local]Ericsson#show card 10 qos log
Slot 10 Ingress:
Last updated entry index: 0
Index  HdrId SubId Len Data
Slot 10 Egress:
Last updated entry index: 0
Index  HdrId SubId Len Data
```

The following example shows output for the **show card qos statistics** command:

```
[local]Ericsson#show card 2 qos statistics
Slot 2 Ingress:
Total events: received 7286, unknown 3642, not logged 0, EOF 0
Policing Map: update 1, delete 1, unknown 0
Circuit      : update 1820, delete 1820, qclear 0, unknown 0
IPPA Mark    : update 1, delete 1, unknown 0
Protocol rate limit map : update 0, delete 0, unknown 0

Slot 2 Egress:
Total events: received 5464, unknown 1822, not logged 0, EOF 0
PQ Map       : update 0, delete 0, unknown 0
MDRR Map     : update 0, delete 0, unknown 0
EDRR Map     : update 0, delete 0, unknown 0
Metering Map : update 1, delete 1, unknown 0
Port Rate limit : update 0, delete 0, unknown 0
Port Group Map : update 0, unknown 0
Congestion Avoidance : update 0, delete 0, unknown 0
Circuit      : update 1820, delete 1820, qclear 0, unknown 0
```

The following example shows output for the **show card qos log detail** command with IP and IPv6 addresses:



```
[local]Ericsson(config)#show card 2 qos log detail
Slot 2 Ingress:
Last updated entry index: 25
Index  HdrId SubId Len Data
   0      7    1 964 Forward map update  policy 0/2 in utest
                        ip address 2.4.0.2, action 0x1, mode 0x110
                        ipv6 address 2:4::2, action 0x1, mode 0x110
                        class 1
                        action 0x4, mode 0
                        class 2
                        ipv6 address 2:4::6, action 0x1, mode 0x100
                        class 3
                        action 0x4, mode 0
                        class 4
                        ipv6 address 2:4::8, action 0x1, mode 0x100
```

1.19 show card traffic

show card slot traffic

1.19.1 Purpose

Displays traffic drop information for the specified card.

Warning!

Use the **show card traffic** command for debug purposes only to collect data when a problem or outage is seen at the customer node. Some **show card** commands might impact card performance.

1.19.2 Command Mode

All modes (10)

1.19.3 Syntax Description

<i>slot</i>	Chassis slot number of the traffic card.
-------------	--

1.19.4 Default

None

1.19.5 Usage Guidelines

Use this command to collect data when a problem or outage occurs at the customer node. Because the output of the command is intended for use by the



support engineers, the output format might differ from typical **show** command output and might not be readable.

1.19.6 Example

The following example shows output for the **show card traffic** command:

```
[local]Ericsson#show card 6 traffic
Slot 6 Ingress:
Card counters
Logging ratelimits:
  max (pkts): 25
  burst (pkts): 25
dropped (pkts): 0
Logging errors:
  enqueue fail: 0
  enqueue full: 0
  truncate fail: 0
  log fail: 0
:::
context_id      : 0x40080001 ref_cnt      : 4
control_mask    :          6 log_mask    : 0xffe
counter_enabled:      no counter_unchanged: 1
Slot 6 Egress:
Card counters
Logging ratelimits:
  max (pkts): 25
  burst (pkts): 25
dropped (pkts): 0
Logging errors:
  enqueue fail: 0
  enqueue full: 0
  truncate fail: 0
  log fail: 0
:::
context_id      : 0x40080001 ref_cnt      : 4
control_mask    :          6 log_mask    : 0xffe
counter_enabled:      no counter_unchanged: 1
```

1.20 show ces

```
show ces [all [normal | outage] slot/port:[ds3-channel:] d
s1-channel:ds0-channel-group]
```

```
show ces [all [normal | outage] slot/port:[ds3-channel:] e1
/ds1-channel]
```

1.20.1 Purpose

Show command to display CESoPSN or SAToP channel attributes.

1.20.2 Command Mode

All modes.



1.20.3 Syntax Description

normal	Display normal circuits.
outage	Display circuits with outages.
slot:port	Slot and port of the circuit.
ds3-channel	The DS3 channel of the circuit.
ds1-channel	The DS1 channel of a CESoPSN circuit.
e1/ds1-channel	The E1 or DS1 channel of a SAToP circuit.
ds0-channel-group	CESoPSN: The DS0 channel group of the circuit.

1.20.4 Default

Displays results for all channels.

1.20.5 Usage Guidelines

The 'IWF state' starts to show 'Normal' upon channel initialization.

1.20.6 Examples

The following examples display CES information in various configurations:

```
[local]Ericsson#show ces 3/2:1:1:1
```

Circuit	Time Slots	CES Type	IWF State	L2vpn
3/2:1:1:1	1-10	CESoPSN	Normal	enabled

```
[local]Ericsson#show ces all
```

Circuit	Time Slots	CES Type	IWF State	L2vpn
3/2:1:1:1	1-10	CESoPSN	Normal	disabled
3/2:1:1:11	11	CESoPSN	Loss of Packet/under-run	enabled
3/2:1:1:12	12-15	CESoPSN	Normal	enabled

```
[local]Ericsson#show ces all normal
```

Circuit	Time Slots	CES Type	IWF State	L2vpn
3/2:1:1	N/A	SAToP	Normal	disabled
3/2:1:3	N/A	SAToP	Normal	enabled



```
[local]Ericsson#show ces all outage
```

Circuit	Time Slots	CES Type	IWF State	L2vpn
3/2:1:2	N/A	SAToP	Loss of Packet/under-run	enabled

```
[local]Ericsson#show ces outage
```

Circuit	CES Type	Cumulative Outage Time (dd:hh:mm:ss)
3/2:1:1:11	CESoPSN	00:00:12:01
3/3:1:2:1	CESoPSN	00:00:20:01

```
[local]Ericsson#show ces outage 3/2:1:1
```

```

Circuit: 3/2:1:1 Service Type: SAToP
-----
Latest Outage Time      - 0 days 0 hours 5 minutes 0 second
(Tue Apr 20 18:25:01 2010 GMT) - (Tue Apr 20 18:20:01 2010 GMT)
Last Outage Time        - 0 days 0 hours 4 minutes 1 second
Last UP Time            - 0 days 0 hours 5 minutes 1 second
Cumulative Outage Time  - 0 days 0 hours 12 minutes 1 second
UP Time                 - 0 days 1 hours 4 minutes 1 second
Number of Outage (s)    - 3

```

```
[local]Ericsson#show ces outage detail
```

```

Circuit: 3/2:1:1:11 Service Type: CESoPSN
-----
Latest Outage Time      - 0 days 0 hours 5 minutes 0 second
(Tue Apr 20 01:25:01 2010 GMT) - (Tue Apr 20 01:20:01 2010 GMT)
Last Outage Time        - 0 days 0 hours 4 minutes 0 second
Last UP Time            - 0 days 0 hours 5 minutes 0 second
Cumulative Outage Time  - 0 days 0 hours 12 minutes 0 second
UP Time                 - 0 days 1 hours 0 minutes 0 second
Number of Outage (s)    - 3

```

```

Circuit: 3/3:1:2:1 Service Type: CESoPSN
-----
Latest Outage Time      - 0 days 0 hours 5 minutes 0 second
(Tue Apr 20 02:25:01 2010 GMT) - (Tue Apr 20 02:10:01 2010 GMT)
Last Outage Time        - 0 days 0 hours 5 minutes 1 second
Last UP Time            - 0 days 0 hours 6 minutes 1 second
Cumulative Outage Time  - 0 days 0 hours 20 minutes 1 second
UP Time                 - 1 days 2 hours 4 minutes 1 second
Number of Outage (s)    - 2

```



1.21 show ces domain

`show ces domain slot/group-id.domain-id`

1.21.1 Purpose

Show command to display CES timing domain.

1.21.2 Command Mode

All modes.

1.21.3 Syntax Description

<i>slot</i>	Slot number.
<i>group-id</i>	Group-ID.
<i>domain-id</i>	Domain-ID.

1.21.4 Default

Displays results for the specified timing domain.

1.21.5 Usage Guidelines

None.

1.21.6 Examples

This SAToP example shows how to display information about timing domain 1.3 on slot 2. There are 5 member trunks (three from port 1 and two from port 3). The current master IWF is associated with DS1 2/3:1:14. This indicates that the timing domain state is active.



```
[local]Ericsson#show ces domain 2/1.3
```

```
Slot 2 Timing Domain: 1.3
Current Master       : 2/3:1:14
```

Members:

```
Port/Channel Type
-----
2/1:1      ds1
2/1:2      ds1
2/1:1:21   ds1
2/3:1:14   ds1
2/3:1:21   ds1
```

This CESoPSN example shows how to display information about timing domain 1.3 on slot 2. There are 5 member trunks (three from port 1 and two from port 3). The current master IWF is associated with DS0 group 4 on DS1 2/3:1:14. This indicates that the timing domain state is active.

```
[local]Ericsson#show ces domain 2/1.3
```

```
Slot 2 Timing Domain: 1.3
Current Master       : 2/3:1:14:4
```

Members:

```
Port/Channel Type
-----
2/1:1      ds1
2/1:2      ds1
2/1:1:21   ds1
2/3:1:14   ds1
2/3:1:21   ds1
```

This example shows how to display information about timing domain 1.3 on slot 2. In this case there are 5 member trunks. None of the IWFs within the group are able to be the domain's master. This can happen, for example, when no IWFs are configured, or if all IWFs in the group are in LOPS or Underrun.



```
[local]Ericsson#show ces domain 2/1.3
```

```
Slot 2 Timing Domain: 1.3  
Current Master      : (Holdover)
```

Members:

Port/Channel Type

```
2/1:1    ds1  
2/1:2    ds1  
2/1:1:21 ds1  
2/3:1:14 ds1  
2/3:1:21 ds1
```

1.22 show ces excessive-packet-loss-rate

```
show ces excessive-packet-loss-rate [detail]
```

```
show ces excessive-packet-loss-rate [slot/port:ds3-channel:ds1-channel:ds0-channel-group]
```

```
show ces excessive-packet-loss-rate [slot/port:ds3-channel:e1/ds1-channel]
```

1.22.1 Purpose

Show command to display CES excessive packet loss rate on CESoPSN or SAToP circuits.

1.22.2 Command Mode

All modes.

1.22.3 Syntax Description

detail	Display detailed excessive packet loss information.
slot:port	Slot and port of the circuit.
ds3-channel	Channel of the circuit.
ds1-channel	Sub-channel of a CESoPSN circuit.
e1/ds1-channel	Sub-channel of a SAToP circuit.
ds0-channel-group	Sub-sub-channel group ID of a CESoPSN circuit.



1.22.4 Default

Displays results for all CES circuits.

1.22.5 Usage Guidelines

If the channel is in active excessive packet loss defect state then there will be no exit entry displayed by the show command.

1.22.6 Examples

The following example shows excessive packet loss rate for all CES circuits.

```
[local]Ericsson#show ces excessive-packet-loss-rate

Circuit      Time Slots CES Type Total Loss Time (dd:hh:mm:ss)
=====
3/2:1:1:1    1-10      cesopsn          00:00:20:00
3/2:1:1:11   11-12     cesopsn          00:00:20:00

Total Channels in Packet Loss : 2
```

The following example shows excessive packet loss rate on CESoPSN circuits.

```
[local]Ericsson#show ces excessive-packet-loss-rate detail

Threshold (%)           : 40
Clearing time           : 10 seconds
Declaration Time        : 2.5 seconds

-----

Circuit                  : 3/2:1:1:1
Time Slot                 : 1-10
CES Type                  : CESoPSN

Current Excessive packet loss snapshot

Entry

Time Stamp                : Tue Apr 20 00:00:01 2010 GMT
Total Packet Loss Time    : 0 days 0 hours 1 minutes 0 seconds

Exit
Packet Loss Time          : 0 days 0 hours 0 minutes 10 seconds
Total Packet Loss Time    : 0 days 0 hours 1 minutes 10 seconds
```



Total Failure Rate (%) : 10
Total Circuit Time: : 0 days 00 hours 10 minutes 10 seconds
Total number of times the channel in packet loss: 2

Circuit : 3/2:1:1:11
Time Slot : 11-12
CES Type : CESoPSN

Current Excessive packet loss snapshot

Entry
Time Stamp : Tue Apr 20 01:00:00 2010 GMT
Total Packet Loss Time : 0 days 0 hours 2 minutes 0 seconds

Exit
Packet Loss Time : 0 days 0 hours 0 minutes 20 seconds
Total Packet Loss Time : 0 days 0 hours 2 minutes 20 second
Total Failure Rate (%) : 20
Total Circuit Time: : 0 days 00 hours 10 minutes 20 seconds
Total number of times the channel in packet loss: 3

Total Channels in Packet Loss : 2

The following example shows excessive packet loss rate for a specific SAToP circuit.



```
[local]Ericsson#show ces excessive-packet-loss-rate 3/2:1:1
```

```
#show ces excessive-packet-loss-rate 3/2:1:1
```

```
Threshold (%)           : 40
Clearing time           : 10 seconds
Declaration Time        : 2.5 seconds
```

```
-----
```

```
Circuit                 : 3/2:1:1
Time Slot               : N/A
CES Type                : SAToP
```

Current Excessive packet loss snapshot

Entry

```
Time Stamp              : Tue Apr 20 00:00:01 2010 GMT
Total Packet Loss Time  : 0 days 0 hours 1 minutes 0 seconds
```

Exit

```
Packet Loss Time        : 0 days 0 hours 0 minutes 10 seconds
Total Packet Loss Time  : 0 days 0 hours 1 minutes 10 seconds
Total Failure Rate (%)  : 10
Total Circuit Time:     : 0 days 0 hours 10 minutes 10 seconds
Total number of times the channel in packet loss: 2
```

Total Channels in Packet Loss: 1

1.23 show chassis

show chassis

1.23.1 Purpose

Displays chassis installed and configured cards and their status.

1.23.2 Command Mode

All modes

1.23.3 Syntax Description

This command has no keywords or arguments.



1.23.4 Default

None

1.23.5 Usage Guidelines

Use the `show chassis` command to display installed and configured cards and their status. Table 1 describes the output fields for the `show chassis` command.

Note:

The following guidelines apply to the data in Table 1:

- A card can be configured with the `card` command (in global configuration mode); it might not be installed.
- The default line card handles traffic sent to it from the active controller card. For a description of the default line card functions, see the `show destination card` command.
- A card is administratively shut down (H flag) with the `shutdown` command (in card configuration mode).
- A card is placed in the on-demand diagnostics (ODD) (O flag) with the `on-demand-diagnostic` command (in card configuration mode).
- A line card is ready (R flag) when the card has been initialized and the code for the Packet Processing ASICs (PPAs) has been downloaded; it is up (U flag) when the PPAs on the card are registered with the requisite NetBSD process.
- A line card cannot be up (U flag) without being ready (R flag), but it can be ready without being up.

Table 1 Field Descriptions for the show chassis Command

Field	Description
Current platform is	Chassis type: <ul style="list-style-type: none">• SE100—SmartEdge 100 router.• SE400—SmartEdge 400 router.• SE600—SmartEdge 600 router.• SE800—SmartEdge 800 router.• SE1200—SmartEdge 1200 router.• SE1200H—SmartEdge 1200H router.
Slot	<code>slot</code> —Slot number for this unit.



Table 1 *Field Descriptions for the show chassis Command*

Field	Description
Configured type	<p>Slot is configured for one of the following card types:</p> <ul style="list-style-type: none"> • line-card-type—Line card is configured; see Table 2 for a list of line card types. • xcrp—Controller card of any type or controller carrier card is configured. • ase—Advanced Services Engine. • ase2—Advanced Services Engine 2. • sse—SmartEdge Storage Engine. • none—Slot is not preconfigured.
Installed type	<p>Slot has card installed:</p> <ul style="list-style-type: none"> • carrier—I/O carrier card; always reported for slot 2. • line-card-type—Line card is installed. • xcrp—Controller card of any type or controller carrier card is installed. • ase—Advanced Services Engine. • ase2—Advanced Services Engine 2. • sse—SmartEdge Storage Engine. • none—Slot is empty. • unknown—Controller card is installed but not initialized.



Table 1 Field Descriptions for the show chassis Command

Field	Description
Initialized	State of card: <ul style="list-style-type: none"> No—PPAs have not been initialized for this card. Yes—PPAs have been initialized for this card.
Flags	Status of card: <ul style="list-style-type: none"> A — Active Crossconnect B — Standby Crossconnect; displayed for slot 2 in the SmartEdge 100 chassis. C — SARCs (Segmentation And Reassembly Controllers) D — Default Traffic Card⁽¹⁾; displayed for slot 2 in the SmartEdge 100 chassis. E — EPPA (Egress Packet Processing ASIC) Ready; displayed for slot 2 in the SmartEdge 100 chassis. G — Upgrading FPGA (Field Programmable Gate Array); displayed for slot 2 in the SmartEdge 100 chassis. H — Card Admin State SHUT⁽²⁾; displayed for slot 2 in the SmartEdge 100 chassis. I — IPPA (Ingress PPA) Ready; displayed for slot 2 in the SmartEdge 100 chassis. M — FPGA Upgrade Required⁽³⁾; displayed for slot 2 in the SmartEdge 100 chassis. N — SONET EU Enabled; not displayed for the SmartEdge 100 chassis. O — Card Admin State ODD⁽⁴⁾; displayed for slot 2 in the SmartEdge 100 chassis. P — Coprocessor Ready (SSE card) P1 — ASP1 Ready (ASE or ASE2 card) P2 — ASP2 Ready (ASE or ASE2 card) R — Traffic Card Ready; displayed for slot 2 in the SmartEdge 100 chassis. S — SPPA (Segmented PPA) Ready; not displayed for the SmartEdge 100 chassis. U — Card PPAs/ASP UP (All cards: PPAs are up; ASE or ASE2 card: at least one APS is up; SSE card: coprocessor is up.); not displayed for the SmartEdge 100 chassis. W—Warm Reboot (Card has not been reloaded since the last switchover.); not displayed for the SmartEdge 100 chassis. X—XCRP mismatch. The standby and active controller cards are not identical; not displayed for the SmartEdge 100 chassis.

(1) The default line card processes packets sent to it from the active controller card.

(2) A line card is administratively shut down with the **shutdown** command (in card configuration mode).

(3) The version of the FPGA that is installed on this line card and the version that is shipped with this release of the operating system do not match; you must update the FPGA on this line card for it to successfully initialize. To upgrade the FPGA images on this line card, see *Installing the SmartEdge OS* for the release that is installed on this SmartEdge router.

(4) A line card is placed in the ODD state with the **on-demand diagnostic** command (in card configuration mode).

Table 2 lists the line, service, and controller card types; in the table, the IR abbreviation is used for Intermediate Reach.

Table 2 Line, Services, and Controller Card Types

Line Card Type	Description
atm-oc3e-8-port	ATM OC-3c/STM-1c card (8-port)



Table 2 Line, Services, and Controller Card Types

Line Card Type	Description
<code>atm-oc12e-2-port</code>	ATM OC-12c/STM-4c card (2-port)
<code>oc3e-8-port</code>	POS OC-3c/STM-1c card (8-port)
<code>oc12e-4-port</code>	POS OC-12c/STM-4c card (4-port)
<code>oc48e-4-port</code>	POS OC-48c/STM-16c card (4-port)
<code>oc192-1-port</code>	OC-192c/STM-64c card (1-port)
<code>ch-oc3oc12-8or2-port</code>	Channelized OC-3/STM-1 (8/4-port) or OC-12/STM-4 (2/1-port)
<code>fege-60-2-port</code>	Fast Ethernet–Gigabit Ethernet (FE–GE) card (60-port FE, 2-port GE)
<code>ge-10-port</code>	Gigabit Ethernet 1020 (GE1020) card (10-port)
<code>ge-20-port</code>	Gigabit Ethernet 1020 (GE1020) card (20-port)
<code>ge-5-port</code>	Gigabit Ethernet (GE) card (5-port)
<code>ge2-10-port</code>	Gigabit Ethernet (GE) DDR card (10-port)
<code>ge4-20-port</code>	Gigabit Ethernet DDR (20-port)
<code>10ge-1-port</code>	10 Gigabit Ethernet (10GE) card (1-port)
<code>10ge-4-port</code>	10 Gigabit Ethernet (10GE) DDR card (4-port)
<code>10ge-oc192-1-port</code>	10 Gigabit Ethernet (10GE) / OC-192c/STM-64c DDR card (1-port)
<code>ase</code>	Advanced Services Engine
<code>ase2</code>	Advanced Services Engine 2
<code>sse</code>	SmartEdge Storage Engine
<code>xcrp4-base</code>	XCRP4 Controller card with a software-configurable interface to external timing equipment (BITS or SSU) and 8 GB of memory

Note: The same line card type is also displayed for the low-density version of the card.

Note: By default, most `show` commands (in any mode) display information for the current context only or, depending on the command syntax, for all contexts. If you are an administrator for the local context, you can insert the optional `context ctx-name` construct, preceding the `show` command, to view output for the specified context without entering that context. For more information about using the `context ctx-name` construct, see the `context` command description.

Note: By appending a space followed by the pipe (`|`) character at the end of a `show` command, you can filter the output using a set of modifier keywords and arguments. For more information, see *Using the CLI*.



1.23.6 Examples

The following example displays output from the **show chassis** command for a SmartEdge 800 router:

```
[local]Ericsson>show chassis
Current platform is SE800

(Flags: A-Active Crossconnect    B-StandBy Crossconnect    C-SARC Ready
        D-Default Traffic Card   E-EPPA Ready             G-Upgrading FPGA
        H-Card Admin State SHUT  I-IPPA Ready             M-FPGA Mismatch
        N-SONET EU Enabled       O-Card Admin State ODD   R-Traffic Card Ready
        S-SPPA Ready             U-Card PPAs UP           W-Warm Reboot
        X-XCRP mismatch)

Slot: Configured-type      Slot: Installed-type      Initialized Flags

-----
1 : none                  1 : none                  No
2 : none                  2 : none                  No
3 : none                  3 : none                  No
4 : none                  4 : none                  No
5 : none                  5 : none                  No
6 : none                  6 : none                  No
7 : none                  7 : xcrp                  No B
8 : none                  8 : xcrp                  Yes A
9 : none                  9 : none                  No
10 : none                 10 : none                 No
11 : none                 11 : none                 No
12 : none                 12 : none                 No
13 : none                 13 : none                 No
14 : none                 14 : none                 No
```

The following example displays output from the **show chassis** command for a SmartEdge 400 router:

```
[local]Ericsson>show chassis
Current platform is SE400

(Flags: A-Active Crossconnect    B-StandBy Crossconnect    C-SARC Ready
        D-Default Traffic Card   E-EPPA Ready             G-Upgrading FPGA
        H-Card Admin State SHUT  I-IPPA Ready             M-FPGA Mismatch
        N-SONET EU Enabled       O-Card Admin State ODD   R-Traffic Card Ready
        S-SPPA Ready             U-Card PPAs UP           W-Warm Reboot
        X-XCRP mismatch)

Slot: Configured-type      Slot: Installed-type      Initialized Flags

-----
1 : none                  1 : oc48e-4-port          No
2 : none                  2 : oc48e-4-port          No
3 : none                  3 : oc48e-4-port          No
4 : none                  4 : oc12e-4-port          No
5 : xcrp                  5 : xcrp                  No BX
6 : xcrp                  6 : xcrp                  Yes A
```

In this example, the standby controller card is not initialized because the active and standby controller cards are not identical.

The following example displays output from the **show chassis** command for a SmartEdge 1200 router:



```
[local]Ericsson>show chassis
Current platform is SE1200 NEBS
(Flags:
  A-Active Crossconnect      B-Standby Crossconnect      C-SARC Ready
  D-Default Traffic Card     E-EPPA Ready                G-Upgrading FPGA
  H-Card Admin State SHUT    I-IPPA Ready                M-FPGA Upgrade Required
  N-SONET EU Enabled          O-Card Admin State ODD      P-Coprocessor Ready
  P1-ASP1 Ready               P2-ASP2 Ready               R-Traffic Card Ready
  S-SPPA Ready                U-Card PPAs/ASP UP          W-Warm Reboot
  X-XCRP mismatch)
Slot: Configured-type      Slot: Installed-type      Initialized Flags

-----
 1 : ge-10-port             1 : none                   No
 2 : ge-10-port             2 : ge-10-port            Yes IEUDR
 3 : none                   3 : none                   No
 4 : none                   4 : none                   No
 5 : none                   5 : none                   No
 6 : fege-60-2-port         6 : fege-60-2-port        Yes IEUR
 7 : xcrp4-base             7 : xcrp4-base            Yes A
 8 : xcrp4-base             8 : xcrp4-base            Yes B
 9 : none                   9 : none                   No
10 : none                  10 : none                   No
11 : ase                   11 : ase                   Yes
12 : ase2                   12 : ase2                   Yes P1P2UR
13 : none                   13 : none                   No
14 : none                   14 : unknown                No
[local]ipsec-se1200-1#
```

The following example displays output from the **show chassis** command for a SmartEdge 600 router:

```
[local]Ericsson>show chassis
Current platform is SE600
(Flags:
  A-Active Crossconnect      B-Standby Crossconnect      C-SARC Ready
  D-Default Traffic Card     E-EPPA Ready                G-Upgrading FPGA
  H-Card Admin State SHUT    I-IPPA Ready                M-FPGA Upgrade Required
  N-SONET EU Enabled          O-Card Admin State ODD      P-Coprocessor Ready
  P1-ASP1 Ready               P2-ASP2 Ready               R-Traffic Card Ready
  S-SPPA Ready                U-Card PPAs/ASP UP          W-Warm Reboot
  X-XCRP mismatch)
Slot: Configured-type      Slot: Installed-type      Initialized Flags

-----
 1 : none                   1 : none                   No
 2 : none                   2 : none                   No
 3 : ge-10-port             3 : ge-10-port            Yes IEUDR
 4 : ase                    4 : ase                    Yes P1P2UR
 5 : none                   5 : none                   No
 6 : ase2                   6 : ase2                   Yes
 7 : xcrp4-base             7 : xcrp4-base            Yes A
 8 : xcrp4-base             8 : xcrp4-base            Yes B
```

1.24 show chassis power

show chassis power [inventory]

1.24.1 Purpose

Displays a summary of power allocation for the current chassis configuration.



1.24.2 Command Mode

All modes

1.24.3 Syntax Description

inventory Optional. Displays power requirements for each line card.

1.24.4 Default

None

1.24.5 Usage Guidelines

Use the **show chassis power** command to display a summary of power allocation for the current chassis configuration. Table 3 lists the descriptions for the fields that this command displays without the **inventory** keyword.

Table 3 Field Descriptions for the show chassis power Command

Field	Description
Power Capacity	Total power capacity of the chassis.
Power Allocated	Total power allocated to the installed components.
Power Available	Power still available for allocation.
Slot	Chassis slot number; N/A if this location is unnumbered.
Configured-type	Name of unit.
Required Watts and A@-48V	Power required by this unit in watts and amperes.
Allocated Watts and A@-48V	Power allocated to this unit in watts and amperes.
Power Status	Power status of this unit: <ul style="list-style-type: none">• denied—Card is in low-power mode (not initialized but minimal power is allocated).• full—Card is allocated full power.• low—No card is configured in this slot; minimal power is allocated.

Table 4 lists the descriptions of the fields that the **inventory** keyword displays.



Table 4 Field Descriptions for the Inventory Keyword

Field	Description
Chassis Type	Chassis type: SE100, SE400, SE600, SE800, SE1200, SE1200H
Chassis Type	Chassis type: SmartEdge
Power Capacity	Total power capacity of the chassis.
XCRP Type	Controller card type: <ul style="list-style-type: none"> • xcrp—Any version of the XCRP or SmartEdge 100 controller carrier card. • xcrp4-base—XCRP4.
Line Card Type	See the <i>card</i> command for line card types.
Power Consumption	Power required for each card (watts and amperes @-48V).

Note: By default, most **show** commands (in any mode) display information for the current context only or, depending on the command syntax, for all contexts. If you are an administrator for the local context, you can insert the optional **context** *ctx-name* construct, preceding the **show** command, to view output for the specified context without entering that context. For more information about using the **context** *ctx-name* construct, see the **context** command description.

Note: By appending a space followed by the pipe (|) character at the end of a **show** command, you can filter the output using a set of modifier keywords and arguments. For more information, see *Using the CLI*.

1.24.6 Examples

The following example displays the power allocation for a SmartEdge 800 chassis:

```
[local]Ericsson>show chassis power
Power Capacity: 1920.00 Watts (40.00 A@-48V) + 10% Tolerance
Power Allocated: 1377.12 Watts (28.69 A@-48V)
Power Available: 734.88 Watts (15.31 A@-48V)
Required
Slot: Configured-type Watts A@-48V Allocated Watts A@-48V Power Status
-----
N/A fan_and_alarm 142.56 2.97 142.56 2.97 full
1 : ge-10-port 141.60 2.95 141.60 2.95 full
```



2	: ge-20-port	177.60	3.70	177.60	3.70	full
3	: none	n/a	n/a	96.00	2.00	low
4	: ge-10-port	141.60	2.95	141.60	2.95	full
5	: ge-10-port	141.60	2.95	141.60	2.95	full
6	: ge-10-port	141.60	2.95	141.60	2.95	full
7	: xcrp4-base	106.08	2.21	106.08	2.21	full
8	: xcrp4-base	106.08	2.21	106.08	2.21	full
9	: ge-10-port	141.60	2.95	141.60	2.95	full
10	: ge-10-port	141.60	2.95	141.60	2.95	full
11	: ge-10-port	141.60	2.95	141.60	2.95	full
12	: ge-10-port	141.60	2.95	141.60	2.95	full
13	: ge-10-port	141.60	2.95	141.60	2.95	full
14	: ge-10-port	141.60	2.95	141.60	2.95	full

The following example shows the output when the **inventory** keyword is entered:

```
[local]Ericsson>show chassis power inventory
Chassis Type                Power Capacity
-----
SE1200 NEBS                3840.00 Watts   80.00 A@-48V

XCRP Type                   Power Consumption
-----
xcrp4-base                 106.08 Watts    2.21 A@-48V

Traffic Card Type           Power Consumption
-----

atm-oc3e-8-port            143.04 Watts    2.98 A@-48V
atm-oc12e-2-port           143.04 Watts    2.98 A@-48V
oc3e-8-port                 101.28 Watts    2.11 A@-48V
oc12e-4-port                103.68 Watts    2.16 A@-48V
oc48e-4-port                156.00 Watts    3.25 A@-48V
oc192-1-port                130.56 Watts    2.72 A@-48V
ch-oc3oc12-8or2-port        135.00 Watts    2.80 A@-48V
fege-60-2-port              134.40 Watts    2.80 A@-48V
ge-10-port                  141.60 Watts    2.95 A@-48V
ge-20-port                  177.60 Watts    3.70 A@-48V
ge-5-port                   110.00 Watts    2.30 A@-48V
ge2-10-port                 96.00 Watts     2.00 A@-48V
ge4-20-port                 300.00 Watts    6.25 A@-48V
10ge-1-port                 130.56 Watts    2.72 A@-48V
10ge-4-port                 300.00 Watts    6.25 A@-48V
10ge-oc192-1-port          96.00 Watts     2.00 A@-48V
ase                          128.64 Watts    2.68 A@-48V
sse                          135.00 Watts    2.80 A@-48V
```

1.25 show circuit

To show the status of a specific type of circuit, the syntax is as follows:

```
show circuit [circuit-type] [bind-type] [up | down] [detail
| summary]
```

To show the status of circuits assigned to a subscriber identified by the RADIUS Agent-Remote-ID or Agent-Circuit-ID attributes, the syntax is:

```
show circuit [agent-remote-id agent-remote-id |
agent-circuit-id agent-circuit-id] [up | down] [detail |
summary]
```

To show the status of circuits assigned to BVI ports, the syntax is:



```
show circuit [bvi {bvi-name | id bvi-id}] [circuit-type]
[bind-type] [up | down] [detail | summary]
```

To show the circuit counters, use the `show circuit counters` command described in Section 1.26 on page 57.

```
show circuit counters...
```

To show the status of l2vpn cross-connect circuits, the syntax is:

```
show circuit [l2vpn-cross-connect [cross-connect-prof-id]]
[circuit-type] [bind-type] [up | down] [detail | summary]
```

To show the status of aggregated circuits of a link group, the syntax is:

```
show circuit [lg {lg-name | id lg-id}] [circuit-type]
[bind-type] [up | down] [detail | summary]
```

To show the status of a circuit connected to a specific slot and port and optionally the circuit type, the syntax is:

```
show circuit [slot/port[:chan[:sub-chan]] [{circuit-id |
circuit-type} [bind-type]] [up | down] [detail | summary]
```

To show the status of circuits assigned to a subscriber identified by a fully qualified subscriber name, the syntax is:

```
show circuit [username subscriber] [up | down] [detail |
summary]
```

1.25.1 Purpose

Displays circuit information for one or more circuits in the system.

1.25.2 Command Mode

All modes

1.25.3 Syntax Description

<i>circuit-type</i>	Type of circuit for which circuit information is displayed. If omitted, displays circuit information for all types of circuits. The <i>circuit-type</i> keywords are: <code>atm</code> , <code>chdlc</code> , <code>clips</code> , <code>dot1q</code> , <code>ether</code> , <code>fr</code> , <code>gre</code> , <code>ipip</code> , <code>ipsec</code> , <code>ipv6-auto</code> , <code>ipv6-man</code> , <code>l2tp</code> , <code>mip-fa</code> , <code>mip-ha</code> , <code>mp</code> , <code>mpls</code> , <code>ppp</code> , <code>pppoe</code> , and <code>vppls</code> . See Table 5 for the components of this argument.
<i>bind-type</i>	Type of binding for which information is displayed, according to one of the keywords listed in Table 6.



<code>up</code>	Displays only circuits that are up.
<code>down</code>	Displays only circuits that are down.
<code>detail</code>	Displays detailed circuit information.
<code>summary</code>	Displays only summary information.
<code>agent-circuit-id</code> <code>agent-circuit-id</code>	Specifies the RADIUS Agent-Circuit-ID attribute of the subscriber session. <i>agent-circuit-id</i> is a text string of up to 63 alphanumeric characters.
<code>agent-remote-id</code> <code>agent-remote-id</code>	Specifies a subscriber session. <i>agent-remote-id</i> is the value of the Agent-Remote-ID attribute in a RADIUS subscriber record. Enter the <i>agent-remote-id</i> argument as a structured subscriber username in the form <i>subscriber@context</i> . A text string of up to 63 alphanumeric characters.
<code>bvi {bvi-name id bvi-id}</code>	Specifies the name or ID of a Bridged Virtual Interface for which information is displayed.
<code>counters</code>	Displays in the circuit counters. See Section 1.26 on page 57 for the <code>show circuit counters</code> command.
<code>lg {lg-name id lg-id}</code>	Displays all the circuits associated with the specified link or APS group.
<code>slot/port</code>	Chassis slot and port number of a line card for which circuit information is displayed. The <i>port</i> argument is required if you enter the <i>slot</i> argument.
<code>chan-num</code>	Channel number for which circuit information is displayed. If omitted, displays circuit information for all channels on the specified port. The range of values depends on the type of port.
<code>sub-chan-num</code>	Subchannel number for which circuit information is displayed. If omitted, displays circuit information for all subchannels in the specified channel. The range of values depends on the type of port.
<code>circuit-id</code>	Circuit identifier, according to one of the constructs listed in Table 7. If omitted, displays circuit information for all circuits on the specified port or channel.
<code>username subscriber</code>	A fully qualified subscriber name for which circuit information is displayed. Enter in the format <i>sub-name@ctx-name</i> .

Note: Keywords and arguments not listed in the Syntax Description table are listed in Table 5, Table 6, and Table 7 of the Usage Guidelines section.

1.25.4 Default

Displays summary information for all circuits of all types in the system.



1.25.5 Usage Guidelines

Use the `show circuit` command to display circuit information for one or more circuits in the system.

If you specify the VLAN tag value for an 802.1Q tunnel, the output includes circuit information for all the PVCs within the tunnel.

Note: By default, most `show` commands (in any mode) display information for the current context only or, depending on the command syntax, for all contexts. If you are an administrator for the local context, you can insert the optional `context ctx-name` construct, preceding the `show` command, to view output for the specified context without entering that context. For more information about using the `context ctx-name` construct, see the `context` command description.

Note: By appending a space followed by the pipe (`|`) character at the end of a `show` command, you can filter the output using a set of modifier keywords and arguments. For more information, see *Using the CLI*.

Table 5 lists the options for the `circuit-type` argument.

Table 5 Options for the circuit-type Argument

Circuit Type (<i>circuit-type</i>)	Description
<code>atm</code>	Specifies ATM circuits.
<code>chdlc</code>	Specifies Cisco HDLC circuits. ⁽¹⁾
<code>clips</code>	Specifies CLIPS circuits.
<code>dot1q</code>	Specifies 802.1Q circuits.
<code>ether</code>	Specifies Ethernet circuits.
<code>fr</code>	Specifies Frame Relay circuits. ⁽²⁾
<code>gre [gre-id]</code>	Specifies GRE tunnel circuits.
<code>ipip [ipip-id]</code>	Specifies IPIP tunnel circuits.
<code>ipsec [ipsec-id]</code>	Specifies IPsec encrypted tunnel.
<code>ipv6-auto [ipv6-auto-id]</code>	Specifies automatic IPv6 tunnel circuits.
<code>ipv6-man [ipv6-man-id]</code>	Specifies manual IPv6 tunnel circuits.
<code>l2tp...</code>	Specifies L2TP circuits Syntax: <code>l2tp {l2tp-peer tunnel l2tp-id session session-id active-slot [active-slot-num] all lns lns-circuit-id}</code>

Table 5 Options for the *circuit-type* Argument

Circuit Type (<i>circuit-type</i>)	Description
<ul style="list-style-type: none"> • <code>l2tp-peer</code> - Name of the L2TP peer. • <code>tunnel l2tp-id</code> - L2TP circuit identifier. • <code>session session-id</code> - Session identifier • <code>active-slot active-slot-num</code> - Slot number. • <code>all</code> - Specifies all L2TP LNS circuits. • <code>lns lns-circuit-id</code> - LNS circuit identifier. 	
<code>mip-fa [mip-fa-id]</code>	Specifies mobile-ip foreign agent (FA) circuits.
<code>mip-ha [mip-ha-id]</code>	Specifies mobile-ip home agent (HA) circuits.
<code>mp mp-id</code>	Specifies multilink PPP link group circuits
<code>mpls [lsp lsp-id]</code>	Specifies MPLS circuits, where <code>lsp-id</code> is the label-switched path (LSP) identifier. The range of values is 1 to 65535.
<code>ppp</code>	Specifies PPP circuits.
<code>pppoe</code>	Specifies PPPoE circuits
<code>vpls [vpls-id]</code>	Specifies VPLS circuits. The range of values is 1 to 65535.

(1) The SmartEdge 100 router does not support the `chdlc` keyword.

(2) The SmartEdge 100 router does not support the `fr` keyword.

Table 6 lists the keyword choices for the *bind-type* argument.

Table 6 The *bind-type* Argument

Keyword (<i>bind-type</i>)	Description
<code>auth</code>	Displays information for circuits that are bound using PAP or CHAP.
<code>bound</code>	Displays information for circuits that are bound.
<code>bypass</code>	Displays information for cross connected circuits.
<code>interface</code>	Display information for circuits that are bound to an interface.
<code>no-bind</code>	Displays information for circuits that have no binding.
<code>subscriber</code>	Displays information for circuits that are bound to subscribers.
<code>unbound</code>	Displays information for unbound circuits.

Table 7 lists the values for the *circuit-id* argument.

Table 7 The *circuit-id* Argument

Circuit ID (<i>circuit-id</i>)		Description
dlci <i>dlci-id</i>		Specifies the data-link connection identifier (DLCI) of a Frame Relay PVC. The range of values is 16 to 991.
vlan-id...		Specifies an 802.1Q tunnel or PVC, and optionally, whether the circuit is CLIPS, IPV6oE, or PPPoE encapsulated. Syntax: vlan-id { <i>pvc-vlan-id</i> <i>tunl-vlan-id</i> <i>tunl-vlan-id:pvc-vlan-id</i> } [clips [<i>clips-id</i>] ipv6oe pppoe [<i>pppoe-id</i>]]
	<i>pvc-vlan-id</i>	Specifies the VLAN tag value of a PVC that is not within an 802.1Q tunnel. Range is 1 to 4095.
	<i>tunl-vlan-id</i>	Specifies the VLAN tag value of a tunnel. Range is 1 to 4095.
	<i>tunl-vlan-id:pvc-vlan-id</i>	Specifies the VLAN tag value of a tunnel followed by the VLAN tag value for the PVC within the tunnel. Range of each is 1 to 4095.
	clips [<i>clips-id</i>]	Specifies CLIPS circuits.
	ipv6oe	Specifies IPV6oE circuits.
	pppoe [<i>pppoe-id</i>]	Specifies PPPoE circuits.
vpi-vci...		Specifies the <i>circuit-id</i> argument using the Virtual path identifier (VPI) and virtual circuit identifier (VCI) of an ATM PVC. The <i>circuit-id</i> argument of an ATM PVC has the following syntax: Syntax: vpi-vci <i>vpi-id</i> <i>vci-id</i> [clips [<i>clips-id</i>] ipv6oe pppoe [<i>pppoe-id</i>]]
	vpi-vci <i>vpi-id</i> <i>vci-id</i>	Specifies the <i>circuit-id</i> argument using the VPI and VCI IDs of an ATM PVC. The range of values of the arguments are 0 to 255 and 1 to 65535, respectively.

1.25.6 Examples

The following example displays the circuits in the output of the **show circuit** command.



```
[local]Ericsson#show circuit
Circuit                                Internal Id  Encap                State Bound to
4/1                                    1/1/3       ethernet             Up
4/1 vlan-id 100                        1/2/10      eth dot1q pppoe      Up
4/2                                    1/1/17      ethernet             Down
4/4                                    1/1/5       ethernet             Down
4/11                                   1/1/19      ethernet             Up
4/12                                   1/1/21      ethernet             Up
7/1                                    1/1/7       ethernet             Up      mgmt@local
10/1                                   1/1/12      ethernet             Down
10/1 vlan-id 100                       1/2/13      eth dot1q pppoe      Down
lg id 25 lag                           1/1/14      ethernet             Down
lg id 25 vlan-id 100                   1/2/15      dot1q                Down
lg id 25 vlan-id 101                   1/2/22      dot1q                Down
```

```
Summary:
total: 12
up: 5
down: 7
bound: 1
unbound: 11
auth: 2
interface: 1
subscriber: 0
bypass: 0
no-bind: 9
atm: 0
chdlc: 0
dot1q: 2
ether: 8
fr: 0
gre: 0
mpls: 0
ppp: 0
pppoe: 2
clips: 0
vpls: 0
ipip: 0
ipsec: 0
ipv6v4-man: 0
ipv6v4-auto: 0
```

The following two examples display an LSP circuit (in the second example) by specifying numeric ID 22:

```
[local]Ericsson>show circuit mpls lsp
Codes : S - MPLS-Static, R - RSVP, L - LDP, B - BGP
Type   LSP Circuit      Endpoint      Direct Next-hop  Out Label
R      255/3:1:1/2/1/22  10.2.2.2/32  10.1.2.2         262144

[local]Ericsson>show circuit mpls lsp 22
Circuit      Internal Id  Encap  State  Bound to
MPLS LSP 22  2/1/22     mpls   Up
```

The following example shows circuit details for slot 3, port 1:

The following example shows how to display data for a hierarchy of circuits:

```
[local]Ericsson>show circuit 3/1:1
Circuit      Internal Id  Encap                State Bound to
3/1:1 vpi-vci 0 33  1/2/52      atm pppoe           Up
3/1:1 vpi-vci 0 33 pppoe 9  6/2/9        atm pppoe ppp       Up      abc@local
3/1:1 vpi-vci 0 34  1/2/53      atm pppoe           Up
3/1:1 vpi-vci 0 34 pppoe 10 6/2/10       atm pppoe ppp       Up      abc@local
```

The following examples show how to display detailed circuit information for link group blue and link group red:

```
[local]Ericsson>show circuit lg blue
Circuit      Internal Id  Encap                State Bound to
blue         1/1/9       atm                  Down
blue vpi-vci 10 32  1/2/10       route1483          Down
```

```
[local]Ericsson>show circuit lg red
Circuit      Internal Id  Encap                State Bound to
red          1/1/4       ethernet             Down
red vlan-id 10  1/2/13      dot1q                Down
```



1.26 show circuit counters

To show the circuit counters of a specific type of circuit:

```
show circuit [persistent] [circuit-type] [detail | live
| queue | subscriber]
```

To show the circuit counters of APS ports:

```
show circuit counters [persistent] aps {aps-name | aps-id}
[circuit-type] [detail | live | queue]
```

To show the circuit counters of circuits assigned to a subscriber identified by the RADIUS Agent-Remote-ID or Agent-Circuit-ID, the syntax is:

```
show circuit counters [persistent] [agent-remote-id
agent-remote-id | agent-circuit-id agent-circuit-id] [detail
| live | queue | subscriber]
```

To show the circuit counters of circuits assigned to BVI pseudo circuits, the syntax is:

```
show circuit counters [persistent] [bvi {bvi-name | id
bvi-id}] [circuit-type] [detail | live | queue | subscriber]
```

To show the circuit counters for a circuit group use the **show circuit counters circuit-group** command described in Section 1.28 on page 70.

```
show circuit counters circuit-group...
```

To show the counters for an l2vpn cross-connect circuits, the syntax is:

```
show circuit counters [persistent] [l2vpn-cross-connect
[cross-connect-prof-id]] [circuit-type] [detail | live |
queue | subscriber]
```

To show the circuit counters of link-group aggregated circuits, the syntax is:

```
show circuit counters [persistent] [lg {lg-name |
id lg-id}] [{circuit-type [detail | live | queue |
subscriber]} | {circuit-id [detail | live | queue]
[aggregate [all]] | subscriber}]
```

To show the circuit counters of circuits in a link group, the syntax is:

```
show circuit counters [persistent] [link-group
{link-group-name | all} link-group-type] [detail | live |
queue | subscriber]
```

To show the circuit counters of circuits connected to a specific slot and port and optionally the circuit type, the syntax is:



```
show circuit [persistent] [slot/port [:chan[:sub-chan]]]  
[circuit-id | circuit-type] [detail | live | queue |  
subscriber]
```

To show the circuit counters of circuits assigned to a subscriber identified by a fully qualified subscriber name, the **show circuit counters username** syntax is:

```
show circuit counters [username subscriber] [detail | live  
| queue | subscriber]
```

1.26.1 Purpose

Displays circuit counters information.

1.26.2 Command Mode

All modes

1.26.3 Syntax Description

persistent	Displays persistent circuit counters; that is, circuit counter values that do not reflect clear operations
circuit-type	Type of circuit for which circuit counters are displayed If omitted, displays circuit information for all types of circuits. The <i>circuit-type</i> keywords are: atm , chdlc , clips , dot1q , ether , fr , gre , ipip , ipsec , ipv6-auto , ipv6-man , l2tp , mip-fa , mip-ha , mp , mpls , ppp , pppoe , and vpls . See Table 8 for the components of this argument.
detail	Displays detailed counter information.
live	Forces the retrieval of live data for summary counters.
subscriber	Displays per-session information.
queue	Displays per-queue information kept by Packet Processing ASIC (PPA) counters; the values reflect the count since the last policy change.
agent-circuit-id agent-circuit-id	Specifies the RADIUS Agent-Circuit-ID attribute of the subscriber session for which circuit counters are displayed. <i>agent-circuit-id</i> is a text string of up to 63 alphanumeric characters.



agent-remote-id <i>agent-remote-id</i>	Specifies a subscriber session for which circuit counters are displayed, <i>agent-remote-id</i> is the value of the Agent-Remote-ID attribute in a RADIUS subscriber record. Enter the <i>agent-remote-id</i> argument as a structured subscriber username in the form subscriber@context. A text string of up to 63 alphanumeric characters.
bvi { <i>bvi-name</i> id <i>bvi-id</i> }	Specifies the name or ID of a Bridged Virtual Interface for which circuit counters are displayed.
l2vpn-cross-connect [<i>cross-connect-prof-id</i>]	Displays the circuit counters for circuits in the L2PN cross connect specified by the cross connect profile ID.
lg { <i>lg-name</i> id <i>lg-id</i> }	Displays the circuit counters associated with the link group or APS group specified by link group name or ID.
circuit-id	Displays the circuit counters for the circuits specified by circuit identifier, according to one of the constructs listed in Table 9. If omitted, displays circuit counters associated with all circuits on the specified port or channel.
link-group { <i>link-group-name</i> all } <i>link-group-type</i>	Displays the circuit counters of a specific type of link group. Optionally, you can also specify the link group link name or all to show all link groups of the specified type. The types of link groups you can enter for the <i>link-group-type</i> argument are: dot1q , ether , hdlc , mfr , and mp .
slot/port	Chassis slot and port number of a line card for which circuit counters are displayed. The <i>port</i> argument is required if you enter the <i>slot</i> argument.
chan-num	Channel number for which circuit counters are displayed. If omitted, displays circuit information for all channels on the specified port. The range of values depends on the type of port.
sub-chan-num	Subchannel number for which circuit counters are displayed. If omitted, displays circuit information for all subchannels in the specified channel. The range of values depends on the type of port.
username <i>subscriber</i>	Displays the circuit counters associated with a fully qualified subscriber name in the format <i>sub-name@ctx-name</i> .

Note: Keywords and arguments not listed in the Syntax Description table are listed in Table 8 or Table 9 of the Usage Guidelines section.



1.26.4 Default

None

1.26.5 Usage Guidelines

Use the `show circuit counters` command to display circuit counters information.

If you specify the VLAN tag value for an 802.1Q tunnel, the output includes circuit counters for all the PVCs within the tunnel.

By default, this command displays only summary circuit information for all circuits with their last known values, which have been cached. Cached values are updated every 60 seconds. Use the `live` keyword to force the system to read and display the current values for the summary counters.

The output of this command provides values that have been accumulated since the counters were last cleared with the `clear circuit counters` command in exec mode, or since the card was last reloaded.

Note: By default, most `show` commands (in any mode) display information for the current context only or, depending on the command syntax, for all contexts. If you are an administrator for the local context, you can insert the optional `context ctx-name` construct, preceding the `show` command, to view output for the specified context without entering that context. For more information about using the `context ctx-name` construct, see the `context` command description.

Note: By appending a space followed by the pipe (`|`) character at the end of a `show` command, you can filter the output using a set of modifier keywords and arguments. For more information, see *Using the CLI*.

Note: When using ATMFWQ queuing policies, do not use the `show circuit counters detail` and `show circuit counters queue` commands to obtain per-queue statistics for ATM PVCs because the command output always reports that all traffic is transmitted on queue zero. Instead, use the `show atm counters queue` command to obtain accurate per-queue statistics for ATM PVCs.

Table 8 lists the options for the `circuit-type` argument.

Table 8 Options for the `circuit-type` Argument

Circuit Type (<i>circuit-type</i>)	Description
<code>atm</code>	Specifies ATM circuits.
<code>chdlc</code>	Specifies Cisco HDLC circuits ⁽¹⁾
<code>clips</code>	Specifies CLIPS circuits.
<code>dot1q</code>	Specifies 802.1Q circuits.

Table 8 Options for the *circuit-type* Argument

Circuit Type (<i>circuit-type</i>)	Description
ether	Specifies Ethernet circuits.
fr	Specifies Frame Relay circuits. ⁽²⁾
gre [<i>gre-id</i>]	Specifies GRE tunnel circuits.
ipip [<i>ipip-id</i>]	Specifies IPIP tunnel circuits.
ipsec [<i>ipsec-id</i>]	Specifies IPSec encrypted tunnel.
ipv6-auto [<i>ipv6-auto-id</i>]	Specifies automatic IPv6 tunnel circuits.
ipv6-man [<i>ipv6-man-id</i>]	Specifies manual IPv6 tunnel circuits.
l2tp...	<p>Specifies L2TP circuits</p> <p>Syntax: <code>l2tp {l2tp-peer tunnel l2tp-id session session-id active-slot [active-slot-num] all lns lns-circuit-id}</code></p> <ul style="list-style-type: none"> • <code>l2tp-peer</code> - Name of the L2TP peer. • <code>tunnel l2tp-id</code> - L2TP circuit identifier. • <code>session session-id</code> - Session identifier. • <code>active-slot active-slot-num</code> - Slot number. • <code>all</code> - Specifies all L2TP LNS circuits. • <code>lns lns-circuit-id</code> - LNS circuit identifier.
mip-fa [<i>mip-fa-id</i>]	Specifies mobile-ip foreign agent (FA) circuits.
mip-ha [<i>mip-ha-id</i>]	Specifies mobile-ip home agent (HA) circuits.
mp <i>mp-id</i>	Specifies multilink PPP link group circuits.
mpls [<i>lsp lsp-id</i>]	Specifies MPLS circuits, where <i>lsp-id</i> is the label-switched path (LSP) identifier. The range of values is 1 to 65535.
ppp	Specifies PPP circuits.
pppoe	Specifies PPPoE circuits
vpls [<i>vpls-id</i>]	Specifies VPLS circuits. The range of values is 1 to 65535.

(1) The SmartEdge 100 router does not support the *chdlc* keyword..

(2) The SmartEdge 100 router does not support the *fr* keyword..

Table 9 lists the ways you can specify the *circuit-id* argument.



Table 9 The circuit-id Argument

	Description
dlci <i>dlci-id</i>	<p>Specifies the <i>circuit-id</i> argument using the data-link connection identifier (DLCI) of a Frame Relay PVC. The range of values for the DLCI ID is 16 to 991.</p> <p>The <i>circuit-id</i> argument of a Frame Relay PVC has the following syntax:</p> <p>Syntax: dlci <i>dlci-id</i> [detail live queue subscriber]</p>
vlan-id...	<p>Specifies the <i>circuit-id</i> argument using the VLAN identifiers of an 802.1Q tunnel or PVC.</p> <p>The <i>circuit-id</i> argument of an 802.1Q tunnel or PVC has the following syntax:</p> <p>Syntax: vlan-id {<i>pvc-vlan-id</i> <i>tunl-vlan-id</i> <i>tunl-vlan-id:pvc-vlan-id</i>} [clips [<i>clips-id</i>] ipv6oe pppoe [<i>pppoe-id</i>]] [detail live queue] [aggregate [all]] subscriber]</p>
pvc-vlan-id	Specifies the VLAN tag value of a PVC that is not within an 802.1Q tunnel. Range is 1 to 4095.
tunl-vlan-id	Specifies the VLAN tag value of a tunnel. Range is 1 to 4095.
tunl-vlan-id:pvc-vlan-id	Specifies the VLAN tag value of a tunnel followed by the VLAN tag value for the PVC within the tunnel. Range of each is 1 to 4095.
aggregate	Specifies that the circuit counters of the inner VLANs are aggregated into the outer VLAN.
all	Specifies that the circuit counters of all circuits are aggregated under the specified VLAN.
clips [<i>clips-id</i>]	Specifies CLIPS circuits.
ipv6oe	Specifies IPV6oE circuits.
pppoe [<i>pppoe-id</i>]	Specifies PPPoE circuits.
subscriber	Specifies per-session information.



Table 9 The circuit-id Argument

	Description
	<p>Specifies the <i>circuit-id</i> argument using the Virtual path identifier (VPI) and virtual circuit identifier (VCI) of an ATM PVC.</p> <p>The <i>circuit-id</i> argument of an ATM PVC has the following syntax:</p> <p>Syntax: <code>vpi-vci vpi-id vci-id [clips [clips-id] ipv6oe pppoe [pppoe-id]] [detail live queue subscriber]</code></p>
<code>vpi-vci vpi-id vci-id</code>	Specifies the <i>circuit-id</i> argument using the VPI and VCI IDs of an ATM PVC. The range of values of the arguments are 0 to 255 and 1 to 65535, respectively.

Table 10 describes the summary counter information that displays for all circuit types if you do not specify the **detail** keyword.

Table 10 Summary Counters

Field	Description
Packets sent	Number of packets or bytes sent.
Packets recvd	Number of packets or bytes received.

Table 11 describes the circuit counters that can be displayed for most types of circuits, depending on their configuration, when you specify the **detail** keyword; the data displayed for these counters, with the exception of the rate counters, is live, not cached data.

Note: In Table 11 the “Receive/Second” and “Transmit/Second” counters are not displayed if you also specify the **persistent** keyword.

Table 11 Circuit Counters

Field	Description
Receive	Number of packets or bytes received.
Receive/Second	Number of packets or bytes per second sent.
Transmit	Number of packets or bytes sent.
Transmit/Second	Number of packets or bytes per second transmitted.
IP Multicast Rcv	Number of multicast packets or bytes received.
IP Multicast Tx	Number of multicast packets or bytes sent.
Unknown Encaps	Number of packets or bytes received where the packet encapsulation is incorrect for the circuit.
Down Drops	Number of packets or bytes dropped because the circuit is down.



Table 11 Circuit Counters

Field	Description
Unreach Drops	Number of packets or bytes dropped because there is no destination route entry for the destination IP address.
Adj Drops	Number of packets or bytes dropped because of adjacency errors or missing adjacency.
WRED Drops Total	Number of packets or bytes dropped by the WRED feature.
Tail Drops Total	Number of packets or bytes dropped because the egress queue is full.
Rate Refresh Interval	Interval (seconds) over which rates have been calculated. Applies only to rate counters.

Table 12 describes the additional specialized counters that can be displayed for various types of circuits, depending on their configuration, when you specify the **detail** keyword. These counters are listed in alphabetical order, which is not necessarily the order in which they are displayed.

Table 12 Additional Counters for Circuits

Field	Description
ARP counters	
Drops	Number of packets or bytes dropped.
Unreachable	Number of packets or bytes dropped because no destination route entry for the ARP IP address exists.
Bridge counters	
Multi/Broadcast	Number of multicast/broadcast packets or bytes originating from this circuit.
Flood	Number of flooding packets or bytes originating from this circuit.
Flood Drops	Number of packets or bytes dropped by flood limiting.
BCast	Number of broadcast packets or bytes originating from this circuit.
BCast Drops	Number of broadcast packets or bytes dropped.
MCast	Number of multicast packets or bytes originating from this circuit.
MCast Drops	Number of multicast packets or bytes dropped.
Restricted Drops	Number of packets or bytes dropped by bridge rule restrictions.
Internal Drops	Number of packets or bytes dropped because of internal errors such as queue overflow.
MAC filter Drops	Number of packets or bytes dropped by the MAC list filters.
CFM counters	
Level	Maintenance domain level of a MA monitoring the given circuit.



Table 12 Additional Counters for Circuits

Field	Description
rx packets	Total number of CCM packets received during the most recent interval by a MEP monitoring the given circuit at the given level.
rx out of seq	Number of CCM packets received out of sequence during the most recent interval by a MEP monitoring the given circuit at the given level.
transmit packets	Total number of CCM packets transmitted by a MEP monitoring the given circuit at the given level.
Encapsulation counters	
Receive FECN	Number of packets received with the Forward Explicit Congestion Notification (FECN) bit set.
Receive BECN	Number of packets received with the Backward Explicit Congestion Notification (BECN) bit set.
Receive DE	Number of packets received with the Discard Eligibility (DE) bit set.
Transmit DE	Number of packets sent with the DE bit set.
IP counters	
Soft GRE MPLS	Number of soft GRE MPLS packets received or number of soft GRE MPLS bytes received.
Not IPv4 drops	Number of packets or bytes dropped that are marked with an unsupported IP version.
Unhandled IP Opt	Number of packets dropped because of unsupported IP options.
Bad IP Length	Number of packets dropped because of invalid IP length.
Bad IP Checksum	Number of packets dropped because of an invalid checksum on the packet.
Broadcast Drops	Number of link layer broadcast packets dropped.
IPoE counters	
Receive	Number of packets or bytes received.
Transmit	Number of packets or bytes sent.
MPLS counters	
MPLS Drops	Number of MPLS packets or bytes dropped.
Metering counters	
Conform	Number of packets or bytes that conform to the policy.
Conform drop	Number of packets or bytes dropped that conform to the policy (this is normally always zero).
Exceed	Number of packets or bytes that exceed the policy that were not dropped.
Exceed drop	Number of packets or bytes dropped that exceed the policy.



Table 12 Additional Counters for Circuits

Field	Description
Parent drop	Number of packets or bytes dropped because of a hierarchical policy of a parent circuit that is inherited by this circuit.
Violate	Number of packets or bytes that violate the policy that were not dropped.
Violate drop	Number of packets or bytes dropped that violate the policy.
NAT counters	
Receive Drops	Number of received packets or bytes dropped.
Transmit Drops	Number of outgoing packets or bytes dropped (dropped before being transmitted).
Policing counters	
Conform	Number of packets that conform to the policy.
Conform drop	Number of packets dropped that conform to the policy (this is normally always zero).
Exceed	Number of packets or bytes that exceed the policy that were not dropped.
Exceed drop	Number of packets or bytes dropped that exceed the policy.
Parent drop	Number of packets or bytes dropped because of hierarchical policy of a parent circuit that is inherited by this circuit.
Violate	Number of packets or bytes that violate the policy that were not dropped.
Violate drop	Number of packets or bytes dropped that violate the policy.
PPP counters	
cntrl	Number of PPP control packets received.
cntrl drops	Number of PPP control packets dropped.
retries	Number of PPP keepalive messages sent because of lack of response from the client.
termreqs	Number of PPP termination request messages received.
PPPoE counters	
bad code	Number of unsupported PPPoE discovery packets received.
cntrl	Number of PPPoE control packets received.
session drops	Number of PPPoE sessions dropped because of lack of response from the client.
PADT sent	Number of PPPoE PADT messages sent.
PADR drops	Number of PPPoE PADR messages dropped.
PADI drops	Number of PPPoE PADI messages dropped.
PADT drops	Number of PPPoE PADT messages dropped.



Table 12 Additional Counters for Circuits

Field	Description
Reverse path forwarding (RPF) counters	
RPF drops	Number of RPF packets or bytes dropped.
RPF suppressed	Number of RPF packets or bytes suppressed.
Traffic counters for each level (n ranges from 0 to 7)	
Traffic index [n]:	Number of packets for level n.
Conform	Number of bytes for level n.
VPLS counters	
Circuit	Identifies the VPLS circuit.
Packets/Bytes Sent	Number of packets sent over this VPLS circuit.
Packets/Bytes Received	Number of packets received by this VPLS circuit.
Protocol Ratelimit Counters	
ARP Drops	Number of ARP packets dropped because of QoS policy protocol ratelimit.

Table 13 describes the counters that are displayed for each subscriber session for the circuits specified by the input parameters when you specify the **subscriber** keyword.

Table 13 Counters for Subscribers

Field	Description
packets sent	Number of packets or bytes sent.
packets rcv	Number of packets or bytes received.
mcast packets sent	Number of multicast packets or bytes sent.
mcast packets rcv	Number of multicast packets or bytes received.

Table 14 describes the counters that are displayed for each queue for the circuits specified by the input parameters when you specify the **queue** keyword. If no queue policy is attached to a circuit, no per-queue information displays.

Table 14 Queue Counters

Field	Description
Queue	Queue number: 0 to 7
Depth	Maximum number of packets allowed for this queue (configured)
Pkts/Bytes Sent	Packets and bytes sent on this queue
WRED Drops	Number of packets dropped by the WRED feature on this queue
Tail Drops	Number of packets dropped because this queue is full



1.26.6 Examples

The following example displays output from the **show circuit counters vpls** command:

```
[local]Ericsson>show circuit counters vpls
Circuit          Packets/Bytes Sent Packets/Bytes Received
VPLS 101          265                311
                  1487               1344
VPLS 102          232                341
                  892                984
```

The following example shows how to display detailed information about circuit counters for a bridged ATM PVC:

```
[local]Ericsson>show circuit counters 2/6 vpi-vci 1 33 detail

Circuit: 2/6 vpi-vci 1 33, Internal id: 1/2/4, Encap: atm-1483-bridged
Packets          Bytes
-----
Receive          :          13717 Receive          :          2337756
Receive/Second   :           0    Receive/Second   :           133
Transmit         :           651 Transmit         :          98322
Transmit/Second  :           0    Transmit/Second  :           0
IP Multicast Rcv :           0    IP Multicast Rcv :           0
IP Multicast Tx  :           0    IP Multicast Tx  :           0
Unknown Encaps   :           0    Unknown Encaps   :           0
Down Drops       :           0    Down Drops       :           0

Unreach Drops    :           0    Unreach Drops    :           0
Adj Drops        :           0    Adj Drops        :           0
WRED Drops Total:           0    WRED Drops Total:           0
Tail Drops Total:           0    Tail Drops Total:           0
Bridge Counters
Multi/Broadcast  :          12800 Multi/Broadcast  :          2193221
Flood           :           477 Flood           :          99205
Flood Drops     :           0    Flood Drops     :           0
Bcast           :           53  Bcast           :          3180
Bcast Drops     :           0    Bcast Drops     :           0
Mcast           :           0    Mcast           :           0
Mcast Drops     :           0    Mcast Drops     :           0
Restricted Drops:           37  Restricted Drops:          3958
Internal Drops  :           0    Internal Drops  :           0
MAC filter Drops :           0    MAC filter Drops :           0
Rate Refresh Interval : 60 seconds
Protocol Rate limit Counters
ARP Drops       :           0    ARP Drops       :           0
```

1.27 show circuit counters (ces)

```
show circuit counters [slot/port:ds3-channel:ds1-channel:ds
0-channel-group | ces]
```

```
show circuit counters [slot/port:ds3-channel:e1/ds1-channel
| ces]
```

1.27.1 Purpose

Show command to display CES circuit counters for all or specified CESoPSN or SAToP circuits.



1.27.2 Command Mode

All modes.

1.27.3 Syntax Description

<i>slot:port</i>	Slot and port of the circuit.
<i>ds3-channel</i>	Channel of the circuit.
<i>ds1-channel</i>	Sub-channel of a CESoPSN circuit.
<i>e1/ds1-channel</i>	Sub-channel of a SAToP circuit.
<i>ds0-channel-group</i>	Sub-sub-channel group ID of a CESoPSN circuit.

1.27.4 Default

Displays results for all circuits.

1.27.5 Usage Guidelines

Tx/Rx Bytes per Packet for L2vpn Attachment circuit is: "TDM payload size" + "control word size" + "PW encap size" (that is, UDP header size in case of UDP PW or MPLS inner label size in case of MPLS PW)

1.27.6 Examples

```
[local]Ericsson#show circuit counters ces
Circuit                Packets/Bytes Sent Packets/Bytes Received
2/1:1:1:1              0                    0
                      0                    0
2/4:1:1:1              0                    0
                      0                    0
2/6:1:1:2              640736               66438
                      52488402            5548482
10/12:1:2:3            0                    0
                      0                    0
```

```
[local]Ericsson#show circuit counters 2/1:1:2:3 ces
Circuit                Packets/Bytes Sent Packets/Bytes Received
2/1:1:2:3              0                    0
                      0                    0
```



1.28 show circuit counters circuit-group

```
show circuit counters circuit-group group-name [detail | live |  
queue | subscriber]
```

1.28.1 Purpose

Displays counters specific to a named circuit group.

1.28.2 Command Mode

All modes

1.28.3 Syntax Description

<i>group-name</i>	Name of a circuit group including virtual port circuit group (VPCG).
detail	Optional. Displays detailed counter information.
live	Optional. Forces the retrieval of live data for summary counters.
subscriber	Optional. Displays per-session information.
queue	Optional. Displays per-queue information kept by Packet Processing ASIC (PPA) counters; the values reflect the count since the last policy change.

1.28.4 Default

Displays last known values of summary counters for all circuits of all types in the system.

1.28.5 Usage Guidelines

Use the **show circuit counters circuit-group** command to display counters specific to a named circuit group including virtual port circuit groups. This command displays the total counts aggregated from all past and present members of the circuit group for the period of time that each circuit was a member of the group.

The output of this command provides values that have been accumulated since the counters were last cleared with the **clear circuit counters** command in exec mode, or since the card was last reloaded.

By default, this command displays only summary counter information for all circuits with their last known values, which have been cached. Cached values are updated every 60 seconds. Use the **live** keyword to force the system to read and display the current values for the summary counters.



Table 15 describes the summary counter information that displays for all circuit types if you do not specify the **detail** keyword.

Table 15 Summary Counters

Field	Description	Field	Description
Packets sent	Number of packets sent	Bytes sent	Number of bytes sent
Packets recvd	Number of packets received	Bytes recvd	Number of bytes received

Table 16 describes the circuit counters that can be displayed for most types of circuits, depending on their configuration, when you specify the **detail** keyword; the data displayed for these counters, with the exception of the rate counters, is live, not cached data.

Note: In Table 16, the **Receive/Second** and **Transmit/Second** counters are not displayed if you also specify the **persistent** keyword.

Table 16 Circuit Counters

Field	Description
Receive	Number of packets or bytes received.
Receive/Second	Number of packets or bytes per second sent.
Transmit	Number of packets or bytes sent. The sum of queues 0 to 7 plus cg base/history is the Transmit total for the circuit group.
Xmits/Queue	Number of packets or bytes sent on an individual queue. Traffic of a circuit can be segregated into 8 queues based on the queue policy configuration. Transmit packets can be diverted to up to 8 queues based on the queue policy configuration.



Table 16 Circuit Counters

Field	Description
cg base/history	<p>The cg base counter is added to the history counter to determine a value for cg base/history.</p> <p>cg base: This counter represents a circuit group baseline. Traffic counts on a circuit from the period before that circuit joins the group is excluded by means of a circuit group baseline (a subtract value).</p> <p>history: This counter represents history offsets and queue configuration adjustments across queues 0 to 7 of all circuit group members. This counter adds a value, if there is some configuration event that clears a counter. For example a queue configuration change can clear a Tx value. History ensures that counters do not diminish in value.</p> <p>cg base/history can be a negative value, if the sum of baselines is greater than the sum of history adjustments.</p>
Transmit/Second	Number of packets or bytes per second transmitted.
IP Multicast Rcv	Number of multicast packets or bytes received.
IP Multicast Tx	Number of multicast packets or bytes sent.
Unknown Encaps	Number of packets or bytes received where the encapsulation is incorrect for the circuit.
Down Drops	Number of packets or bytes dropped because the circuit is down.
Unreach Drops	Number of packets or bytes dropped because there is no destination route entry for the destination IP address.
Adj Drops	Number of packets or bytes dropped because of adjacency errors or missing adjacency.
WRED Drops Total	Number of packets or bytes dropped by the WRED feature.
Tail Drops Total	Number of packets or bytes dropped because the egress queue is full.
Rate Refresh Interval	Interval (seconds) over which rates have been calculated. Applies only to rate counters.

Table 17 describes the additional specialized counters that can be displayed for various types of circuits, depending on their configuration, when you specify the **detail** keyword. These counters are listed in alphabetical order, which is not necessarily the order in which they are displayed.

Table 17 Additional Counters for Circuits

Field	Description
ARP counters	
Drops	Number of packets or bytes dropped
Unreachable	Number of packets or bytes dropped because no destination route entry for the ARP IP address exists



Table 17 Additional Counters for Circuits

Field	Description
Bridge counters	
Multi/Broadcast	Number of multicast/broadcast packets or bytes originating from this circuit
Flood	Number of flooding packets or bytes originating from this circuit
Flood Drops	Number of packets or bytes dropped by flood limiting
BCast	Number of broadcast packets or bytes originating from this circuit
BCast Drops	Number of broadcast packets or bytes dropped
MCast	Number of multicast packets or bytes originating from this circuit
MCast Drops	Number of multicast packets or bytes dropped
Restricted Drops	Number of packets or bytes dropped by bridge rule restrictions
Internal Drops	Number of packets or bytes dropped because of internal errors such as queue overflow
MAC filter Drops	Number of packets or bytes dropped by the MAC list filters.
CFM counters	
Level	Maintenance domain level of a MA monitoring the given circuit
rx packets	Total number of CCM packets received during the most recent interval by a MEP monitoring the given circuit at the given level
rx out of seq	Number of CCM packets received out of sequence during the most recent interval by a MEP monitoring the given circuit at the given level
transmit packets	Total number of CCM packets transmitted by a MEP monitoring the given circuit at the given level
Encapsulation counters	
Receive FECN	Number of packets received with the Forward Explicit Congestion Notification (FECN) bit set
Receive BECN	Number of packets received with the Backward Explicit Congestion Notification (BECN) bit set
Receive DE	Number of packets received with the Discard Eligibility (DE) bit set
Transmit DE	Number of packets sent with the DE bit set
IP counters	
Soft GRE MPLS	Number of soft GRE MPLS packets or bytes received
Not IPv4 drops	Number of packets or bytes dropped that are marked with an unsupported IP version
Unhandled IP Opt	Number of packets dropped because of unsupported IP options
Bad IP Length	Number of packets dropped because of invalid IP length



Table 17 Additional Counters for Circuits

Field	Description
Bad IP Checksum	Number of packets dropped because of an invalid checksum on the packet
Broadcast Drops	Number of link layer broadcast packets dropped
IPoE counters	
Receive	Number of packets or bytes received
Transmit	Number of packets or bytes sent
MPLS counters	
MPLS Drops	Number of MPLS packets or bytes dropped
Metering counters	
Conform	Number of packets or bytes that conform to the policy
Conform drop	Number of packet or bytess dropped that conform to the policy (this is normally zero)
Exceed	Number of packets or bytes that exceed the policy that were not dropped.
Exceed drop	Number of packets or bytes dropped that exceed the policy
Parent drop	Number of packets or bytes dropped because of a hierarchical policy of a parent circuit that is applied tothis circuit
Violate	Number of packets or bytes that violate the policy that were not dropped.
Violate drop	Number of packets or bytes dropped that violate the policy
NAT counters	
Receive Drops	Number of received packets or bytes dropped
Transmit Drops	Number of outgoing packets or bytes dropped (dropped before being transmitted)
Policing counters	
Conform	Number of packets or bytes that conform to the policy
Conform drop	Number of packets or bytes dropped that conform to the policy (this is normally zero)
Exceed	Number of packets or bytes that exceed the policy that were not dropped.
Exceed drop	Number of packets or bytes dropped that exceed the policy
Parent drop	Number of packets or bytes dropped because of hierarchical policy of a parent circuit that was applied to this circuit
Violate	Number of packets or bytes that violate the policy that were not dropped.
Violate drop	Number of packets or bytes dropped that violate the policy
PPP counters	



Table 17 Additional Counters for Circuits

Field	Description
cntrl	Number of PPP control packets received
cntrl drops	Number of PPP control packets dropped
retries	Number of PPP keepalive messages sent because of lack of response from the client
termreqs	Number of PPP termination request messages received
PPPoE counters	
bad code	Number of unsupported PPPoE discovery packets received
cntrl	Number of PPPoE control packets received
session drops	Number of PPPoE sessions dropped because of lack of response from the client
PADT sent	Number of PPPoE PADT messages sent
PADR drops	Number of PPPoE PADR messages dropped
PADI drops	Number of PPPoE PADI messages dropped
PADT drops	Number of PPPoE PADT messages dropped
Reverse path forwarding (RPF) counters	
RPF drops	Number of RPF packets or bytes dropped
RPF suppressed	Number of RPF packets or bytes suppressed
Traffic counters for each level (n ranges from 0 to 7)	
Traffic index [n]:	Number of packets or bytes for level n
VPLS counters	
Circuit	Identifies the VPLS circuit.
Packets/Bytes Sent	Number of packets sent over this VPLS circuit.
Packets/Bytes Received	Number of packets received by this VPLS circuit.
Protocol Ratelimit Counters	
ARP Drops	Number of ARP packets or bytes dropped because of QoS policy protocol ratelimit.

Table 18 describes the counters that are displayed for each subscriber session for the circuits specified by the input parameters when you specify the **subscriber** keyword.

Table 18 Counters for Subscribers

Field	Description
packets sent	Number of packets or bytes sent
packets recv	Number of packets or bytes received



Table 18 Counters for Subscribers

Field	Description
mcast packets sent	Number of multicast packets or bytes sent
mcast packets rcv	Number of multicast packets or bytes received

Table 19 describes the counters that are displayed for each queue for the circuits specified by the input parameters when you specify the **queue** keyword. If no queue policy is attached to a circuit, no per-queue information displays.

Table 19 Queue Counters

Field	Description
Queue	Queue number: 0 to 7
Depth	Maximum number of packets allowed for this queue (configured)
Pkts/Bytes Sent	Packets and bytes sent on this queue
WRED Drops	Number of packets dropped by the WRED feature on this queue
Tail Drops	Number of packets dropped because this queue is full

Note: By default, most **show** commands (in any mode) display information for the current context only or, depending on the command syntax, for all contexts. If you are an administrator for the local context, you can insert the optional **context ctx-name** construct, preceding the **show** command, to view output for the specified context without entering that context. For more information about using the **context ctx-name** construct, see the **context** command description.

By appending a space followed by the pipe (|) character at the end of a **show** command, you can filter the output using a set of modifier keywords and arguments. For more information, see *Using the CLI*.

1.28.6 Examples

The following output shows the **show circuit counters circuit-group queue** command applied to circuit group **cg-1g-1**:



```
[local]Ericsson>show circuit counter circuit-group cg-lg-1 queue
[local]Heehaw#show cir co circuit-group cg-lg-1 q
Circuit: circuit-group cg-lg-1, Internal id: 1/2/8194, Queue Policy: SAVEMART
Queue Depth      (Pkts/Bytes) Sent      WRED Drops      Tail Drops
0      4000              0              0              0
          0              0              0
1      4000              620              0              0
          11830             0              0
2      4000              0              0              0
          0              0              0
3      4000              0              0              0
          0              0              0
4      4000              0              0              0
          0              0              0
5      4000              0              0              0
          0              0              0
6      4000              0              0              0
          0              0              0
7      4000              1976             0              0
          446576            0              0
```

The following output shows the **show circuit counters circuit-group detail** command applied to circuit group cg-lg-1:

```
[local]Ericsson>show circuit counter circuit-group cg-lg-1 detail
Circuit: circuit-group cg-lg-1, Internal id: 1/2/8194, Encap: ethernet
Packets      Bytes
-----
Receive      :      1360  Receive      :      307360
Receive/Second :      4.04  Receive/Second :      913.98
Transmit      :      1360  Transmit      :      307360
Xmits/Queue
0      :      0      0      :      0
1      :      0      1      :      0
2      :      0      2      :      0
3      :      0      3      :      0
4      :      0      4      :      0
5      :      0      5      :      0
6      :      0      6      :      0
7      :      2052     7      :      463752
cg base/history :     -692  cg base/history :    -156392
Transmit/Second :      4.04  Transmit/Second :      913.98
IP Multicast Rcv:      0      IP Multicast Rcv:      0
IP Multicast Tx :      0      IP Multicast Tx :      0
Unknown Encaps :      0      Unknown Encaps :      0
Down Drops     :      0      Down Drops     :      0
Unreach Drops  :      0      Unreach Drops  :      0
Adj Drops      :      0      Adj Drops      :      0
WRED Drops Total:      0      WRED Drops Total:      0
```



```
WRED Drops/Queue          WRED Drops/Queue          0
0                           0 0                               0
1                           0 1                               0
2                           0 2                               0
3                           0 3                               0
4                           0 4                               0
5                           0 5                               0
6                           0 6                               0
7                           0 7                               0
Tail Drops Total:         0 Tail Drops Total:         0
Tail Drops/Queue          Tail Drops/Queue          0
0                           0 0                               0
1                           0 1                               0
2                           0 2                               0
3                           0 3                               0
4                           0 4                               0
5                           0 5                               0
6                           0 6                               0
7                           0 7                               0

IP Counters
Soft GRE MPLS :           0 Soft GRE MPLS :           0
Not IPv4 drops :           0 Not IPv4 drops :           0
Unhandled IP Opt:         0
Bad IP Length :           0
Bad IP Checksum :         0
Not IPv6 drops :           0 Not IPv6 drops :           0
Broadcast Drops :         0
PPP Counters
Cntrl Rcv :               18 Cntrl Rcv :               746
Cntrl Tx :                20 Cntrl Tx :                846

Cntrl Drops Rcv :         0
Retries Rcv :             0
Termreqs Rcv :            0

PPPoE Counters
Cntrl :                   4 Cntrl :                   256
Session Drops :           0
PADT Sent :               0
PADR Drops :              0
PADI Drops :              0
PADT Drops :              0
Bad Code :                0

ARP Counters
Drops :                   0 Drops :                   0
Unreachable :             0 Unreachable :             0
Rate Refresh Interval : 90 seconds
```

1.29 show circuit counters port-pseudowire

```
show circuit counters port-pseudowire pw-name [detail |
live]
```

1.29.1 Command Mode

All



1.29.2 Syntax Description

<i>pw-name</i>	Name of the port pseudowire (PW).
<i>detail</i>	Specifies detailed output.
<i>live</i>	Specifies that the port PW counters are live.

1.29.3 Default

None

1.29.4 Usage Guidelines

Use the `show circuit counters port-pseudowire` command to verify that traffic is flowing through the port PW connections.

1.29.5 Examples

The following example displays detailed output for the `l2-net` port PW:



```
[local]rock1200#show circuit counters port-pseudowire l2-net detail
Circuit: PORT PW 1, Internal id: 1/1/23, Encap: ethernet
Packets                                     Bytes
-----
Receive : 0 Receive : 0
Receive/Second : 0.00 Receive/Second : 0.00
Transmit : 0 Transmit : 0
Xmits/Queue :
0 : 0 Xmits/Queue :
1 : 0 1 : 0
2 : 0 2 : 0
3 : 0 3 : 0
4 : 0 4 : 0
5 : 0 5 : 0
6 : 0 6 : 0
7 : 0 7 : 0
Xmit Q Deleted : 0 Xmit Q Deleted : 0
Transmit/Second : 0.00 Transmit/Second : 0.00
IP Multicast Rcv: 0 IP Multicast Rcv: 0
IP Multicast Tx : 0 IP Multicast Tx : 0
Unknown Encaps : 0 Unknown Encaps : 0
Down Drops : 0 Down Drops : 0
Unreach Drops : 0 Unreach Drops : 0
Adj Drops : 0 Adj Drops : 0
WRED Drops Total: 0 WRED Drops Total: 0
WRED Drops/Queue :
0 : 0 WRED Drops/Queue :
1 : 0 1 : 0
2 : 0 2 : 0
3 : 0 3 : 0
4 : 0 4 : 0
5 : 0 5 : 0
6 : 0 6 : 0
7 : 0 7 : 0
Tail Drops Total: 0 Tail Drops Total: 0
Tail Drops/Queue :
0 : 0 Tail Drops/Queue :
1 : 0 1 : 0
2 : 0 2 : 0
3 : 0 3 : 0
4 : 0 4 : 0
5 : 0 5 : 0
6 : 0 6 : 0
7 : 0 7 : 0

IP Counters
Soft GRE MPLS : 0 Soft GRE MPLS : 0
Not IPv4 drops : 0 Not IPv4 drops : 0
Unhandled IP Opt: 0
Bad IP Length : 0
Bad IP Checksum : 0
Not IPv6 drops : 0 Not IPv6 drops : 0
Broadcast Drops : 0

ARP Counters
Drops : 0 Drops : 0
Unreachable : 0 Unreachable : 0
Rate Refresh Interval : 60 seconds
```

The following example displays live counters for the same port PW:

```
[local]rock1200#show circuit counters port-pseudowire l2-net live
Circuit      Packets/Bytes Sent Packets/Bytes Received
PORT PW 1    0              0
              0              0
```

1.30 show circuit-group

show circuit-group [name] [detail]



1.30.1 Purpose

Displays a list of the configured circuit groups or details pertaining to a specified circuit group.

1.30.2 Command Mode

All modes

1.30.3 Syntax Description

- name** Optional. Name of a configured circuit group, which is an alphanumeric string comprising up to 39 characters. If the **name** argument is omitted, a list of all circuit groups is displayed.
- detail** Optional. Displays detailed information for the circuit groups or specified circuit group.

1.30.4 Default

When entered without any optional syntax, this command displays a list of the configured circuit groups.

1.30.5 Usage Guidelines

Use the **show circuit-group** command to display a list of the configured circuit groups or details pertaining to a specified circuit group. If you specify the detail keyword, this command displays additional information about the circuit group or groups, such as a list of its members.

1.30.6 Examples

The following example shows how to display a list of configured circuit groups:

```
[local]Ericsson#show circuit-group
Circuit-group          ID      Ccct      Port Link-group
-----
bar                    1        4        11/1    --
group1                 2         0         --      --
group2                 3         1         --      --
group3                 4         0        12/5    --
group4                 5         0        12/5    --
METER6789012345678901234567890123456789 6         0         --      --
```

The following example shows how to display details for each of the configured circuit groups shown in the previous example:



```
[local]Ericsson#show circuit-group detail
Circuit-Group: bar, ID    : 1

-----
Ccct count      : 4          Port          : 11/1
Internal Handle : 255/27:1:2/1/1/4105
Constituent Circuits:
1. 11/1 vlan-id 40          2. 11/1 vlan-id 30:1
3. 11/1 vlan-id 30:2        4. 11/1 vlan-id 30:3
Circuit-Group: group1, ID    : 2

-----
Ccct count      : 0
Internal Handle : 255/27:1:3/1/1/4113
Circuit-Group: group2, ID    : 3

-----
Ccct count      : 1
Internal Handle : 255/27:1:4/1/1/4122
Constituent Circuits:
1. 12/4 vlan-id 60
Circuit-Group: group3, ID    : 4

-----
Ccct count      : 0          Port          : 12/5
Internal Handle : 255/27:1:5/1/1/4124
Circuit-Group: group4, ID    : 5

-----
Ccct count      : 0          Port          : 12/5
Internal Handle : 255/27:1:6/1/1/4127
Circuit-Group: METER6789012345678901234567890123456789, ID    : 6

-----
Ccct count      : 0
Internal Handle : 255/27:1:7/1/1/4128
```

1.31 show circuit mip-fa

```
show circuit mip-fa [[mip-fa-value] [auth | bound | bypass |
interface | no-bind | subscriber | unbound] [up | down] [detail
| summary]]
```

1.31.1 Purpose

Displays Mobile IP foreign agent (FA) circuit information.

1.31.2 Command Mode

Exec

1.31.3 Syntax Description

mip-ha-value	Specifies the mobile circuit ID. Enter a value from 1 to 16777216.
auth	Not applicable to mobile-IP circuits



bound	Displays information only for bound circuits
bypass	Not applicable to mobile-IP circuits
interface	Not applicable to mobile-IP circuits
no-bind	Displays information only for circuits which have no bindings configured.
subscriber	Not applicable to mobile-IP circuits
unbound	Displays information only for unbound circuits.
up	Displays only the circuits that are up.
down	Displays only the circuits that are down
detail	Displays detailed information.
summary	Displays summary information.

1.31.4 Usage Guidelines

Use this command to display mobile IP HA circuit information.

1.31.5 Default

None

1.31.6 Examples

The following example show the output of this command:

```
[local]Ericsson>show circuit mip-ha
Circuit      Internal Id  Encap      State Bound to
MIP-HA 1     11/1/1      mip-ha     Up    subif@local
MIP-HA 2     11/1/2      mip-ha     Up    subif@local
Summary:
total: 2
up: 2        down: 0
bound: 2     unbound: 0
auth: 0      interface: 0  subscriber: 0  bypass: 0
no-bind: 0   atm: 0       chdlc: 0      dot1q: 0
ether: 0     fr: 0        gre: 0
mpls: 0      ppp: 0       ppoe: 0
clips: 0     vpls: 0      ipip: 0
ipsec: 0     ipv6v4-man: 0 ipv6v4-auto: 0
```

The following example show the output of this command when the circuit ID is specified:



```
[local]Ericsson>show circuit mip-ha 1
Circuit          State Encaps          Bind Type  Bind Name
MIP-HA 1         Up    mip-ha
Summary:
total: 1
up: 1             down: 0
bound: 1          unbound: 0
auth: 0           interface: 0    subscriber: 0    bypass: 0
no-bind: 0        atm: 0         chdlc: 0        dot1q: 0
ether: 0          fr: 0          gre: 0
mpls: 0           ppp: 0         ppoe: 0
clips: 0          vpls: 0        ipip: 0
ipsec: 0          ipv6v4-man: 0   ipv6v4-auto: 0
```

1.32 show circuit vpls

```
show circuit vpls [circuit-id] [auth | bound | interface | no-bind |
subscriber | unbound] [up | down] [detail | summary]
```

1.32.1 Purpose

Displays Virtual Private LAN Services (VPLS) circuit information.

1.32.2 Command Mode

All modes

1.32.3 Syntax Description

<i>circuit-id</i>	Optional. System-generated ID for the VPLS circuit. The range of values is 1 to 65535.
auth	Optional. Displays only circuits that have been dynamically bound by the bind authentication command.
bound	Optional. Displays only bound circuits.
interface	Optional. Displays only circuits that have been bound to an interface by the bind interface command.
no-bind	Optional. Displays only circuits that have no bindings configured.
subscriber	Optional. Displays only circuits that have been indirectly bound to an interface by using the IP address within the local or Remote Authentication Dial-In User Service (RADIUS) subscriber record for the specified subscriber bound to an interface by the bind subscriber command.
unbound	Optional. Displays only unbound circuits.
up	Optional. Displays only circuits that are up.
down	Optional. Displays only circuits that are down.



detail Optional. Displays detailed circuit information.

summary Optional. Displays summary information only.

1.32.4 Default

None

1.32.5 Usage Guidelines

Use the **show circuit vpls** command to display VPLS circuit information.

Note: By default, most **show** commands (in any mode) display information for the current context only or, depending on the command syntax, for all contexts. If you are an administrator for the local context, you can insert the optional **context ctx-name** construct, preceding the **show** command, to view output for the specified context without entering that context. For more information about using the **context ctx-name** construct, see the **context** command description.

Note: By appending a space followed by the pipe (|) character at the end of a **show** command, you can filter the output using a set of modifier keywords and arguments. For more information, see *Using the CLI*.

1.32.6 Examples

The following example displays output from the **show circuit vpls** command:

```
[local]Ericsson>show circuit vpls
Circuit          Internal Id  Encap          State Bound to
VPLS 101         0/1/101     vpls           Up
Summary:
  total: 1
    up: 0          down: 1
  bound: 0         unbound: 1
  auth: 0          interface: 0
    atm: 0         chdlc: 0      subscriber: 0    no-bind: 1
    fr: 0          gre: 0        dot1q: 0         ether: 0
  pppoe: 0         clips: 0      mpls: 0         ppp: 0
  ipip: 0          ipv6v4-man: 0    ipv6v4-auto: 0
```

1.33 show clips

show clips [[all [dhcp | down | static | starting | up] | counters
[detail] [clear] | slot/port] | summary]]

1.33.1 Purpose

Displays clientless IP service selection (CLIPS) information.



1.33.2 Command Mode

All modes

1.33.3 Syntax Description

<code>all</code>	Optional. Displays all CLIPS sessions.
<code>dhcp</code>	Optional. Displays CLIPS sessions Dynamic Host Configuration Protocol (DHCP).
<code>down</code>	Optional. Displays CLIPS sessions that are down.
<code>static</code>	Optional. Displays static CLIPS sessions.
<code>starting</code>	Optional. Displays CLIPS sessions changing to up or down.
<code>up</code>	Optional. Displays CLIPS sessions that are up.
<code>counters</code>	Optional. Displays CLIPS counters.
<code>detail</code>	Optional. Displays detailed CLIPS counters information.
<code>clear</code>	Optional. Clears the displayed CLIPS counters.
<code>slot</code>	Optional. Chassis slot number.
<code>port</code>	Optional. Card port number.
<code>summary</code>	Optional. Provides a brief summary of CLIPS configuration and status.

1.33.4 Default

None

1.33.5 Usage Guidelines

Use the `show clips` command to display all CLIPS information.

Note: The SmartEdge 100 router limits the value of the `slot` argument to 2.

Note:

The value for the `port` argument on the SmartEdge 100 router is either of the following:

- For a native port, it is 1 or 2.
- For a MIC port, it depends on the MIC and MIC slot in which the line card is installed.



Note: By default, most **show** commands (in any mode) display information for the current context only or, depending on the command syntax, for all contexts. If you are an administrator for the local context, you can insert the optional **context** *ctx-name* construct, preceding the **show** command, to view output for the specified context without entering that context. For more information about using the **context** *ctx-name* construct, see the **context** command description.

Note: By appending a space followed by the pipe (|) character at the end of a **show** command, you can filter the output using a set of modifier keywords and arguments. For more information, see *Using the CLI*. For information about troubleshooting CLIPS, see *BRAS Troubleshooting Guide*.

The **no vendor-class** and **vendor-class len** fields occur in the output of **show clips counters detail** and have the definitions:

- **no vendor-class**

Counter for the number of sessions that have not come up because there is no **vendor-class-identifier** to use either from DHCP packet or from the configuration as set up by the **service clips dhcp** command.

- **vendor-class len**

Counter for the number of sessions that have not come up because the length of the **vendor-class-identifier** is greater than 48.

1.33.6 Examples

The following example shows how to display output for a single static CLIPS permanent virtual circuit (PVC):

```
[local]Ericsson>show clips all
```

Circuit	IpAddr	Username
9/1 clips 1	10.1.1.1	s1@c1

The following example shows how to display counters for a single static CLIPS PVC:

```
[local]Ericsson>show clips counters
```

```
Mon June 28 18:09:29 2005
Session-----
Authen Success          1      Authen Failure          0
Session Up              1      Session Down           0
DHCP-----
Create Rcvd             0      Delete Rcvd            0
Re-Create Rcvd          0
SessionThrottling-----
Starting                 0      DHCP Denied            0
```



The following examples display various information about five static and five dynamic CLIPS sessions:

```
[local]Ericsson>show clips all
```

Circuit	IpAddr	Username
9/1 clips 1	10.3.1.1	s1@c2
9/1 clips 2	10.3.1.2	s2@c2
9/1 clips 3	10.3.1.3	s3@c2
9/1 clips 4	10.3.1.4	s4@c2
9/1 clips 5	10.3.1.5	s5@c2
10/1 clips 20007	10.1.0.3	02:dd:00:00:00:01
10/1 clips 20008	10.1.0.4	02:dd:00:00:00:02
10/1 clips 20009	10.1.0.5	02:dd:00:00:00:03
10/1 clips 20010	10.1.0.6	02:dd:00:00:00:04
10/1 clips 20011	10.1.0.7	02:dd:00:00:00:05

```
[local]Ericsson>show clips 9/1
```

Circuit	IpAddr	Username
9/1 clips 1	10.3.1.1	s1@c2
9/1 clips 2	10.3.1.2	s2@c2
9/1 clips 3	10.3.1.3	s3@c2
9/1 clips 4	10.3.1.4	s4@c2
9/1 clips 5	10.3.1.5	s5@c2

```
[local]Ericsson>show clips 10/1
```

Circuit	IpAddr	Username
10/1 clips 20007	10.1.0.3	02:dd:00:00:00:01
10/1 clips 20008	10.1.0.4	02:dd:00:00:00:02
10/1 clips 20009	10.1.0.5	02:dd:00:00:00:03
10/1 clips 20010	10.1.0.6	02:dd:00:00:00:04
10/1 clips 20011	10.1.0.7	02:dd:00:00:00:05

```
[local]Ericsson>show clips summary
```

Mon June 28 18:55:49 2005		
Dynamic circuits	7183	Static circuits 0
Sessions up	7076	Sessions down 0
Sessions starting	107	Sessions awaiting IP 0



```
[local]Ericsson>show clips counters detail
```

```
Mon Jun 28 18:56:16 2005
Authen Success          12405      Authen Failure          0
  Session Up            12405      Session Down             0
DHCP-----
  Create Rcvd           13525      Delete Rcvd              0
  Re-Create Rcvd        1012
SessionThrottling-----
  Starting              108      DHCP Denied              1012
DHCP_CreateFail-----
  Denied (limit)        1012      Parent Not Found         0
  Circ. Create fail      0      No Memory                 0
  Duplicate MAC          0
DHCP_DeleteFail-----
  Circ. not found        0
Circuit-----
  Create                12513      Delete                    0
CircuitCreateFail-----
  No Memory              0      Parent Limit              0
  Handle Create          0      Table Insert              0
  Retry Authen           0      Reserve Handle            0
  No Vendor-class        0      Vendor-class len          0
  Bad Parent Encaps      0
ISM-----
  Msg Ignored            0
```

```
[local]Ericsson>show clips all static
```

Circuit	IpAddr	Username
9/1 clips 1	10.3.1.1	s1@c2
9/1 clips 2	10.3.1.2	s2@c2
9/1 clips 3	10.3.1.3	s3@c2
9/1 clips 4	10.3.1.4	s4@c2
9/1 clips 5	10.3.1.5	s5@c2

```
[local]Ericsson>show clips all dhcp
```

Circuit	IpAddr	Username
10/1 clips 20007	10.1.0.3	02:dd:00:00:00:01
10/1 clips 20008	10.1.0.4	02:dd:00:00:00:02
10/1 clips 20009	10.1.0.5	02:dd:00:00:00:03
10/1 clips 20010	10.1.0.6	02:dd:00:00:00:04
10/1 clips 20011	10.1.0.7	02:dd:00:00:00:05

1.34 show clips-group

show clips-group

1.34.1 Purpose

Displays information about clientless IP service selection (CLIPS) groups.

1.34.2 Command Mode

All modes



1.34.3 Syntax Description

This command has no keywords or arguments.

1.34.4 Default

None

1.34.5 Usage Guidelines

Use the `show clips-group` command to display information about CLIPS groups.

Note: By default, most `show` commands (in any mode) display information for the current context only or, depending on the command syntax, for all contexts. If you are an administrator for the local context, you can insert the optional `context ctx-name` construct, preceding the `show` command, to view output for the specified context without entering that context. For more information about using the `context ctx-name` construct, see the `context` command description.

Note: By appending a space followed by the pipe (|) character at the end of a `show` command, you can filter the output using a set of modifier keywords and arguments. For more information, see *Using the CLI*. For information about troubleshooting CLIPS, see the *BRAS Troubleshooting Guide*.

1.34.6 Examples

The following example shows how to display information about CLIPS groups:

```
[local]Ericsson>show clips-group
```

1.35 show clock

```
show clock [rtc | system]
```

1.35.1 Purpose

Displays the current date and time given by either the system clock or real-time clock.

1.35.2 Command Mode

All modes



1.35.3 Syntax Description

rtc	Optional. Displays the time in Greenwich Meridian Time (GMT) given by the real-time clock. Displays a dead-battery message if the real-time clock battery is dead.
system	Optional. Displays the current time in GMT given by the system clock.

1.35.4 Default

The time and date given by the system clock is displayed.

1.35.5 Usage Guidelines

Use the **show clock** command to display the current date and time given by either the system clock or real-time clock. The hour is expressed in a 24-hour format; for example, 6:03 p.m. is 18:03:00.

Note: The **system clock timezone** command is described in the Command List.

Note: By default, most **show** commands (in any mode) display information for the current context only or, depending on the command syntax, for all contexts. If you are an administrator for the local context, you can insert the optional **context ctx-name** construct, preceding the **show** command, to view output for the specified context without entering that context. For more information about using the **context ctx-name** construct, see the **context** command description.

Note: By appending a space followed by the pipe (|) character at the end of a **show** command, you can filter the output using a set of modifier keywords and arguments. For more information, see *Using the CLI*.

1.35.6 Examples

The following example displays output from the **show clock** command:

```
[local]Ericsson>show clock
Wed Apr 12 17:03:49 2006 GMT
```

The following example displays the output from the **show clock** command with the **rtc** keyword when the real-time clock battery is dead:

```
[local]Ericsson#show clock rtc
Mon May 14 17:11:37 2007 GMT (Status: RTC Battery is dead)
```



1.36 show clock-source

`show clock-source`

1.36.1 Purpose

Displays clock source information on the system.

1.36.2 Command Mode

All modes

1.36.3 Syntax Description

This command has no keywords or arguments.

1.36.4 Default

None

1.36.5 Usage Guidelines

Use the `show clock-source` command to display clock source information on the system. Table 20 lists the fields that are displayed by this command along with their possible values and descriptions.

Table 20 Field Descriptions for the show clock-source Command

Field	Value/Description
Timing Type	<ul style="list-style-type: none">sonet—Configured value for the XCRP4 Controller card, or T1 BITS version of the XCRP Controller card.sdh—Configured value for the XCRP4 Controller card, or E1 SSU version of the XCRP Controller card.
Current clock source	Configured input timing reference for the clock: <ul style="list-style-type: none">external—Input timing reference is from external equipment.internal—Input timing reference is the clock on board the controller card.line—Input timing reference is the receive signal from a port on an installed optical line card.



Table 20 *Field Descriptions for the show clock-source Command*

Field	Value/Description
Current PLL State	<p>Current state of the Phase Locked Loop (PLL) clock on the controller card:</p> <ul style="list-style-type: none"> Free Run—No input timing reference is supplied to the PLL; its output signal is controlled internally. Holdover—No input timing reference is supplied to the PLL; its output signal is controlled by data gathered from the last time the PLL was in Locked mode. Locked—The PLL output signal is phase-locked to its input timing reference. Unlocked—The PLL is attempting to lock the phase of its output signal to its input timing reference. <p>Not all conditions apply to all controller cards.</p>
Configured clock sources: <ul style="list-style-type: none"> External primary, secondary Line primary, secondary 	<ul style="list-style-type: none"> YES—External clock source configured as the input timing reference. NO—No external clock source configured. NO—No optical port configured as the input timing reference. <i>slot/port</i>—Slot and port of the optical line card configured as the input timing reference.
Interface information: Frame Format Rx Primary, Secondary	<p>Configured framing for the external interface:</p> <ul style="list-style-type: none"> crc4—E1 interface. esf—DS-1 interface. no-crc4—E1 interface. sf—DS-1 interface.

Note: By default, most **show** commands (in any mode) display information for the current context only or, depending on the command syntax, for all contexts. If you are an administrator for the local context, you can insert the optional **context ctx-name** construct, preceding the **show** command, to view output for the specified context without entering that context. For more information about using the **context ctx-name** construct, see the **context** command description.

By appending a space followed by the pipe (|) character at the end of a **show** command, you can filter the output using a set of modifier keywords and arguments. For more information, see *Using the CLI*.

1.36.6 Examples

The following example displays the clock source on a system:

```
[local]Ericsson>show clock-source
Timing Type           : sonet
Current clock source   : internal
Current PLL State     : Free Run (internal clock)
Configured clock sources:
External              : primary                : NO
External              : secondary              : NO
Line                  : primary (slot/port)    : NO
Line                  : secondary (slot/port)  : NO
Interface Information:
Frame Format Rx        Primary      Secondary
sf                    sf
```



1.37 show community-list

```
show community-list [cl-name | first-match cl-name
{community-num | list reg-exp | local-as | no-advertise |
no-export} | summary]
```

1.37.1 Purpose

Displays information about configured Border Gateway Protocol (BGP) community lists.

1.37.2 Command Mode

All modes

1.37.3 Syntax Description

<i>cl-name</i>	Optional. Community list name.
<i>first-match</i>	Optional. Searches for the first match in the community list specified by the <i>cl-name</i> argument.
<i>community-num</i>	Unsigned decimal or an encoded 32-bit value in <i>nn:nn</i> format, where the first <i>nn</i> is the autonomous system number (ASN) and the second <i>nn</i> is a 2-byte number. The range of values is 1 to 4,294,967,295.
list <i>reg-exp</i>	Set of entries, separated by a colon, in a community list.
local-as	Propagates this route only to peers in the local autonomous system. Does not send this route to external peers even if they are in the same confederation.
no-advertise	Does not advertise this route to any peer (internal or external).
no-export	Does not advertise this route out of the local autonomous system (AS) confederation, or out of the local AS, if it is not part of a confederation.
summary	Optional. Displays community list summary information.

1.37.4 Default

Displays all configured community lists.



1.37.5 Usage Guidelines

Use the `show community-list` command to display information about configured BGP community lists.

Note: By default, most `show` commands (in any mode) display information for the current context only or, depending on the command syntax, for all contexts. If you are an administrator for the local context, you can insert the optional `context ctx-name` construct, preceding the `show` command, to view output for the specified context without entering that context. For more information about using the `context ctx-name` construct, see the `context` command description.

Note: By appending a space followed by the pipe (`|`) character at the end of a `show` command, you can filter the output using a set of modifier keywords and arguments. For more information, see *Using the CLI*.

1.37.6 Examples

The following example displays two community lists (1 and 2):

```
[local]Ericsson>show community-list
community-list a2community:

count: 4, sequences: 30 - 60, client count: 1
modified: 2 day(s), 20 hour(s) ago
  seq 30 permit 64001:3600 (hits: 0, cache hits: 0)
  seq 40 permit 64001:22 (hits: 0, cache hits: 0)
  seq 50 permit 11:121 (hits: 4, cache hits: 2)
  seq 60 permit 11:102 (hits: 2223, cache hits: 2217)
community-list 11:121-cl-wtn:
count: 0, sequences: 0 - 0, client count: 1
modified: 2 day(s), 20 hour(s) ago
community-list no-export/11:121-delete:
count: 2, sequences: 10 - 20, client count: 1
modified: 2 day(s), 20 hour(s) ago
  seq 10 permit 11:121 (hits: 0, cache hits: 0)
  seq 20 permit no-export (hits: 0, cache hits: 0)
total community lists: 3
```

1.38 show configuration

`show configuration [url] [asp] [feature]`

1.38.1 Purpose

Displays the current configuration of the SmartEdge router or the contents of a previously saved configuration file on the local file system.

1.38.2 Command Mode

All modes (10)



1.38.3 Syntax Description

<i>url</i>	Optional. URL of a configuration file.
<i>asp</i>	Optional. Configured ASP name.
<i>feature</i>	Optional. Feature or function for which configuration information is to be displayed according to one of the keywords or constructs listed in Table 21.

1.38.4 Default

The entire running configuration displays and includes only those commands that are required to modify the default configuration of the SmartEdge router.

1.38.5 Usage Guidelines

Use the **show configuration** command to display the current configuration of the SmartEdge router or the contents of a previously saved configuration file on the local file system.

You can use **show configuration** command in any mode. However, the optional keywords and constructs that are available and the information that they display depend on the mode in which you enter the command. For example, when you enter the **show configuration** command in context configuration mode, the system displays only the commands that apply to that context.

Use the **show configuration** command with the *url* argument to display the current system configuration or a previously saved configuration. When referring to a file on the local file system, the URL takes the following form:

```
[/device][/directory]/filename.ext
```

The *device* argument can be **flash**, or if a mass-storage device is installed, **md**. If the *device* argument is not specified, the default value is the device in the current working directory. If the *directory* argument is not specified, the default value is the current directory. Directories can be nested. The *filename* argument can be up to 256 characters in length.

Note: You can also use this command to display the contents of a previously saved configuration file; see *Managing Configuration Files*.

Note: By default, most **show** commands (in any mode) display information for the current context only or, depending on the command syntax, for all contexts. If you are an administrator for the local context, you can insert the optional **context ctx-name** construct, preceding the **show** command, to view output for the specified context without entering that context. For more information about using the **context ctx-name** construct, see the **context** command description.



Note: By appending a space followed by the pipe (|) character at the end of a **show** command, you can filter the output using a set of modifier keywords and arguments. For more information, see *Using the CLI*.

Table 21 lists the possible values for the *feature* argument.

Table 21 Optional Keywords and Constructs for the feature Argument

Keyword or Construct	Description
acl	access control lists (ACLs)
ancp	Access Node Control Protocol (ANCP)
aps	Automatic Protection Switching (APS)
arp	Address Resolution Protocol (ARP)
atm	Asynchronous Transfer Mode (ATM)
bgp	Border Gateway Protocol (BGP)
bridge	bridges
bypass	cross-connected, or multiprotocol, circuit configuration
card [slot]	line cards, or optionally, a line card in a specific slot number
cfm	Ethernet CFM (Connectivity Fault Management)
circuit-group	circuit group name
context ctx-name	context
dhcp	Dynamic Host Configuration Protocol (DHCP) relay or proxy
dns	Domain Name System (DNS)
dot1q	802.1Q protocol
dpi	DPI configuration
forward	forward policy configuration
flow	flow admission control (FAC) profile ⁽¹⁾
fr	Frame Relay
gre	Generic Routing Encapsulation (GRE) tunnels
gsmp	General Switch Management Protocol (GSMP)
hr	HTTP redirect
igmp	Internet Group Management Protocol (IGMP)
interface	interfaces
isis	Intermediate System-to-Intermediate System (IS-IS) protocol
l2vpn	Layer 2 Virtual Private Networks (L2VPNs)
l2tp	Layer 2 Tunneling Protocol (L2TP) peers and groups
ldp	Label Distribution Protocol (LDP)



Table 21 Optional Keywords and Constructs for the feature Argument

Keyword or Construct	Description
<code>link-group</code>	link group configuration
<code>log</code>	system logging facility
<code>mobile-ip</code>	Mobile IP
<code>mpls</code>	Multiprotocol Label Switching (MPLS)
<code>mpls-static</code>	MPLS static
<code>msdp</code>	Multicast Source Discovery Protocol (MSDP)
<code>nat</code>	Network Address Translation (NAT)
<code>nd</code>	Neighbor Discovery (ND) protocol
<code>ntp</code>	Network Time Protocol (NTP)
<code>ospf</code>	Open Shortest Path First (OSPF) protocol
<code>ospf3</code>	OSPF Version 3 (OSPFv3) protocol
<code>pim</code>	Protocol Independent Multicast (PIM)
<code>policy</code>	routing policies
<code>port [slot[port]]</code>	ports on line cards
<code>ppp</code>	Point-to-Point Protocol (PPP)
<code>pppoe</code>	PPP over Ethernet (PPPoE)
<code>qos</code>	quality of service (QoS)
<code>rip</code>	Routing Information Protocol (RIP)
<code>rsvp</code>	Resource Reservation Protocol (RSVP)
<code>sbc-distributed</code>	SBC configuration
<code>snmp</code>	Simple Network Management Protocol (SNMP)
<code>software license</code>	software licenses
<code>static</code>	static routes
<code>tunnel</code>	tunnels, including IPSec tunnels

(1) Not all controller cards support flow.

1.38.6 Examples

The following example displays the active configuration of the system (in exec mode) running in the router:



```
[local]Ericsson#show configuration
```

```
Building configuration...
```

```
Current configuration:
```

```
!
```

```
! Configuration last changed by user 'pm' at Mon Jan 23 06:18:22 2006
!
```

The following example displays a previously saved configuration file, `full.cfg`, (in exec mode):

```
[local]Ericsson#show configuration /flash/full.cfg bgp
```

```
!
```

```
! Configuration last changed by user 'pm' at Fri Mar 24 06:18:22 2006
```

```
!
```

```
context local
```

```
!
```

```
ip localhost localhost 127.0.0.1
```

```
---(more)---
```

The following example shows several configuration parameters: the default subscriber, the `xyzprofile1` subscriber profile, and the specific subscriber called `saro`. All are in the `xyz` context. The example shows the current configuration (`xyz`) because no configuration file is specified:

```
[xyz]Redback#show configuration
```

```
Building configuration...
```

```
Current configuration:
```

```
!
```

```
context xyz
```

```
domain xyz.com
```

```
!
```

```
no ip domain-lookup
```

```
!
```

```
interface pool-A multibind
```

```
ip address 192.168.27.1/24
```

```
ip pool 192.168.27.0/24
```



```
!  
interface tunnel-endpoint  
    ip address 1.1.1.2/30  
no logging console  
!  
aaa authentication subscriber global  
aaa accounting l2tp tunnel radius  
aaa accounting l2tp session radius  
aaa update subscriber 10  
!  
radius attribute calling-station-id format slot-port  
radius attribute calling-station-id pvc-pad  
!  
subscriber default  
    ip address pool  
    timeout absolute 999999  
    timeout idle 3000  
    session-action absolute-timeout acct-alive  
    session-action traffic-limit acct-alive  
subscriber profile xyzprofile1  
    timeout absolute 999999  
    timeout idle 3000  
    session-action absolute-timeout acct-alive  
    session-action idle-timeout acct-alive  
    session-action traffic-limit acct-alive  
!
```



```
subscriber name saro
    timeout absolute 999999
    timeout idle 3000
    session-action absolute-timeout acct-alive
    session-action idle-timeout acct-alive
    session-action traffic-limit acct-alive
l2tp calling-number format slot-port
!
l2tp-peer name oregon media udp-ip remote ip 1.1.1.1 local 1.1.1.2
    function xyz-only
    local-name Redback
    domain xyz.com
!
!
end
```

1.39 show configuration acl

```
show configuration acl
```

1.39.1 Purpose

Displays the IP access control list (ACL) configuration.

1.39.2 Command Mode

All modes (10)

1.39.3 Syntax Description

This command has no keywords or arguments.



1.39.4 Default

None

1.39.5 Usage Guidelines

Use the `show configuration acl` command to display the IP ACL configuration.

Note: By default, most `show` commands (in any mode) display information for the current context only or, depending on the command syntax, for all contexts. If you are an administrator for the local context, you can insert the optional `context ctx-name` construct, preceding the `show` command, to view output for the specified context without entering that context. For more information about using the `context ctx-name` construct, see the `context` command description.

Note: By appending a space followed by the pipe (|) character at the end of a `show` command, you can filter the output using a set of modifier keywords and arguments. For more information, see *Using the CLI*.

1.39.6 Examples

The following examples displays output for the `show configuration acl` command when IPv4 ACLs are configured:

```
[local]Ericsson#show configuration acl
Building configuration...
Current configuration:
context local
!
interface ip-acl-if
    ip access-group ip-acl-if in
!
interface ipacl-if
    ip access-group ipacl in
!
ip access-list ip-acl-2
    seq 10 permit ospf any
!
ip access-list ipacl
    seq 10 permit ip any
```

The following example shows the output for the `show configuration acl` command when an IPv6 ACL and an administrative access-group is configured in the local context:



```
[local]Ericsson(config-ctx)#show configuration acl
Building configuration...
Current configuration:
context local
!
  ipv6 admin-access-group list6 in count
!
!
  ipv6 access-list list6
    seq 10 deny tcp 21::/64 eq 1024
    seq 12 deny tcp 22:1:1::2/128 any traffic-class eq df
    seq 15 deny fragment any any
    seq 20 deny udp any any range 80 81
    seq 30 deny esp any any
    seq 900 permit ipv6 any any
!
! ** End Context **
!
end
```

1.40 show configuration arp

show configuration arp

1.40.1 Purpose

Displays Address Resolution Protocol (ARP) commands for the current configuration.

1.40.2 Command Mode

All modes.)

1.40.3 Syntax Description

This command has no keywords or arguments.

1.40.4 Default

None

1.40.5 Usage Guidelines

Use the **show configuration arp** command to display ARP commands for the current configuration.



Note: By default, most **show** commands (in any mode) display information for the current context only or, depending on the command syntax, for all contexts. If you are an administrator for the local context, you can insert the optional **context *ctx-name*** construct, preceding the **show** command, to view output for the specified context without entering that context. For more information about using the **context *ctx-name*** construct, see the **context** command description.

Note: By appending a space followed by the pipe (|) character at the end of a **show** command, you can filter the output using a set of modifier keywords and arguments. For more information, see *Using the CLI*.

1.40.6 Examples

The following examples displays output from the **show configuration arp** command:

```
[local]Ericsson#show configuration arp
Building configuration...
Current configuration:
context local
!
interface toToronto
    ip arp timeout 360
    ip arp delete-expired
!
ip arp 10.1.1.1 00:30:23:32:12:82
```

1.41 show configuration asp

show configuration asp

1.41.1 Purpose

Displays Advanced Services Processor (ASP) commands for the current configuration.

1.41.2 Command Mode

All modes (10)

1.41.3 Syntax Description

This command has no keywords or arguments.



1.41.4 Default

None

1.41.5 Usage Guidelines

Use the `show configuration asp` command to display the current ASP configuration for the current context.

Note: By default, most `show` commands (in any mode) display information for the current context only or, depending on the command syntax, for all contexts. If you are an administrator for the local context, you can insert the optional `context ctx-name` construct, preceding the `show` command, to view output for the specified context without entering that context. For more information about using the `context ctx-name` construct, see the `context` command description.

Note: By appending a space followed by the pipe (|) character at the end of a `show` command, you can filter the output using a set of modifier keywords and arguments. For more information, see *Using the CLI*.

1.41.6 Examples

The following example illustrates the usage of the `show configuration asp` command:

```
[local]Ericsson#show configuration asp
Building configuration...
Current configuration:
!
asp pool DUMMY service security
asp pool dpi_pool service security
  asp 9/1
  asp 9/2
asp group dpi_grp
  pool dpi_pool
  asp-count 1
!
!
context local
!
! ** End Context **
!
card ase 9
!
end
```

1.42 show configuration bgp

`show configuration bgp`



1.42.1 Purpose

Displays the current Border Gateway Protocol (BGP) configuration information for the current context.

1.42.2 Command Mode

All modes (10)

1.42.3 Syntax Description

This command has no keywords or arguments.

1.42.4 Default

None

1.42.5 Usage Guidelines

Use the `show configuration bgp` command to display the current BGP configuration for the current context.

Note: By default, most `show` commands (in any mode) display information for the current context only or, depending on the command syntax, for all contexts. If you are an administrator for the local context, you can insert the optional `context ctx-name` construct, preceding the `show` command, to view output for the specified context without entering that context. For more information about using the `context ctx-name` construct, see the `context` command description.

Note: By appending a space followed by the pipe (|) character at the end of a `show` command, you can filter the output using a set of modifier keywords and arguments. For more information, see *Using the CLI*. For information about troubleshooting BGP, see *L3VPN Troubleshooting*.

1.42.6 Examples

The following example displays the active BGP configuration in exec mode:

```
[local]Ericsson#show configuration bgp
```

```
Building configuration...
```

```
Current configuration:
```

```
context local
```

```
!
```

```
router bgp 64173
```




```
local-preference 90
address-family ipv4 unicast
    dampening
    redistribute static
    network 10.100.2.3/32
address-family ipv4 multicast
    network 1.2.3.4/32
!
peer-group full-routes external
    advertisement-interval 10
    ebgp-multihop 20
    address-family ipv4 unicast
!
neighbor 10.100.2.3 external
    remote-as 64001
    shutdown
    ebgp-multihop 10
    address-family ipv4 unicast
!
neighbor 10.12.208.81 external
    remote-as 64001
    shutdown
    ebgp-multihop 10
    address-family ipv4 unicast
!
neighbor 192.168.4.100 external
    remote-as 64001
    address-family ipv4 unicast
    route-map abc in
!
neighbor 10.13.49.171 external
    remote-as 64171
    shutdown
    address-family ipv4 unicast
!
neighbor 10.13.49.172 external
    remote-as 64172
    shutdown
    address-family ipv4 unicast
```



```
address-family ipv4 multicast
!
neighbor 10.13.49.174 internal
no address-family ipv4 unicast
address-family ipv4 multicast
address-family ipv4 vpn
!
neighbor 10.13.49.207 internal
no address-family ipv4 unicast
address-family ipv4 vpn
prefix-list 3.0.0.0/8 out
!
neighbor 155.53.1.235 external
remote-as 14207
peer-group full-routes
!
neighbor 10.13.49.245 external
remote-as 60245
peer-group full-routes
shutdown
```

1.43 show configuration cfm

show configuration cfm

1.43.1 Purpose

Displays the parameter settings for all Connectivity Fault Management (CFM) instances configured in the SmartEdge router.

1.43.2 Command Mode

Exec (10)

1.43.3 Syntax Description

This command has no keywords or arguments.



1.43.4 Default

None

1.43.5 Usage Guidelines

Use the `show configuration cfm` command to display the parameter settings for all CFM instances configured in the SmartEdge router.

Note: By default, most `show` commands (in any mode) display information for the current context only or, depending on the command syntax, for all contexts. If you are an administrator for the local context, you can insert the optional `context ctx-name` construct, preceding the `show` command, to view output for the specified context without entering that context. For more information about using the `context ctx-name` construct, see the `context` command description.

Note: By appending a space followed by the pipe (`|`) character at the end of a `show` command, you can filter the output using a set of modifier keywords and arguments. For more information, see *Using the CLI*.

1.43.6 Examples

The following example illustrates the output of this command:

```
[local]Ericsson#show configuration cfm
Building configuration...
Current configuration:
!
!Ethernet connectivity fault management configuration
!
ethernet-cfm cfm-lg
    level 0
    domain-name cfm-lg
    maintenance-association mal
        ccm
            std-interval 10s
            mep-remotelist 200
            mep-local 9 lg lge direction down
!
```



```
ethernet-cfm instance-1
  level 5
  domain-name redback
  mip 5 1/3
  maintenance-association platform
    ccm
      std-interval 1s
      frame-loss 5
    mep-remotelist 101
    mep-local 100 1/2 vlan-id 100
!
ethernet-cfm instance-2
  level 5
  domain-name redback
  maintenance-association platform
    ccm
      std-interval 1s
      frame-loss 5
    mep-remotelist 100
    mep-local 101 1/1 vlan-id 100
!
!
end
```

1.44 show configuration (circuits)

show configuration {*circuit-type* | circuit-group}

1.44.1 Purpose

Displays the configuration of a specified circuit type or all circuit groups and their members.

1.44.2 Command Mode

All modes (10)



1.44.3 Syntax Description

<code>circuit-type</code>	<p>Type of circuit for which circuit configuration commands are displayed, according to one of the following keywords:</p> <ul style="list-style-type: none"> • atm—Displays Asynchronous Transfer Mode (ATM) permanent virtual circuit (PVC) configuration commands. • bypass—Displays cross-connected circuit configuration commands. • dot1q—Displays 802.1Q PVC configuration mode commands. • fr—Displays Frame Relay PVC configuration mode commands. The SmartEdge 100 router does not support the fr keyword. • gre—Displays Generic Routing Encapsulation (GRE) tunnel and tunnel circuit configuration commands. • l2tp—Displays Layer 2 Tunneling Protocol (L2TP) peer and group configuration commands. • tunnel—Displays GRE tunnel circuit configuration commands.
<code>circuit-group</code>	Displays the configuration commands related to circuit groups and their members.

1.44.4 Default

None

1.44.5 Usage Guidelines

Use the **show configuration (circuits)** command to display the configuration of a specified circuit type or all circuit groups and their members.

Use the **show configuration** command with the `circuit-type` argument to display the configuration of a specified circuit type.

Use the **show configuration** command with the `circuit-group` keyword to display the configuration related to circuit groups and their members.

Note: For the other varieties of the **show configuration** command, see *Command List*.

Note: By default, most **show** commands (in any mode) display information for the current context only or, depending on the command syntax, for all contexts. If you are an administrator for the local context, you can insert the optional **context ctx-name** construct, preceding the **show** command, to view output for the specified context without entering that context. For more information about using the **context ctx-name** construct, see the **context** command description.



Note: By appending a space followed by the pipe (|) character at the end of a `show` command, you can filter the output using a set of modifier keywords and arguments. For more information, see *Using the CLI*.

1.44.6

Examples

The following example shows how to display the configuration of ATM PVCs in the SmartEdge system:



```
[local]Ericsson#show configuration atm
Building configuration...
```

Current configuration:

```
context local
atm profile 1.ubr
  counters 12
  shaping ubr
atm profile 1.vbrrt
  clpbit
  counters 12
  shaping vbr-rt pcr 100 cdvt 100 scr 99 bt 1000
atm profile atmprol
  shaping ubr
!
card atm-oc3-2-port 6
port atm 6/1
  atm pvc 1 32 profile 1.ubr encap route1483
  atm pvc 1 34 profile 1.ubr encap multi1483
  circuit protocol ipoe
  circuit protocol pppoe
  atm pvc 1 39 profile 1.vbrrt encap multi1483
  circuit protocol pppoe
!
card atm-oc3-2-port 6
port atm 6/2
  atm pvc 1 32 profile 1.ubr encap route1483
  bind interface multicircuit local
  ip host 1.1.1.2
  atm pvc 1 33 profile 1.vbrrt encap bridge1483
  atm pvc 1 34 profile 1.ubr encap multi1483
  circuit protocol ipoe
  bind interface bifur local
  circuit protocol pppoe
  atm pvc 1 40 profile 1.ubr encap route1483
  bind interface multicircuit local
```

The following example shows how to display configuration of all circuit groups and their members:



```
[local]Ericsson#show configuration circuit-group
Building configuration...

Current configuration:
circuit-group bar port 11/1
qos hierarchical mode strict
qos policy policing group-hierarchical-policy hierarchical
qos policy queuing pwfq_test
!
circuit-group group1
qos policy policing group-hierarchical-policy hierarchical !
circuit-group group2
qos policy policing police_cct_grp inherit
qos policy metering meter_cct_grp hierarchical !
circuit-group group3 port 12/5
!
circuit-group group4 port 12/5
qos weight 10
!
circuit-group METER6789012345678901234567890123456789
!
!
card ge3-4-port 11
port ethernet 11/1
dot1q pvc 30:1
circuit-group-member bar
dot1q pvc 30:2
circuit-group-member bar
dot1q pvc 30:3
circuit-group-member bar
dot1q pvc 40
circuit-group-member bar
!
!
port ethernet 12/4
dot1q pvc 60
circuit-group-member group2
!
end
```




1.45 show configuration context

`show configuration context ctx-name`

1.45.1 Purpose

Displays configuration information for a specified context.

1.45.2 Command Mode

All modes (10)

1.45.3 Syntax Description

ctx-name Name of an existing context or domain alias of an existing context.

1.45.4 Default

None

1.45.5 Usage Guidelines

Use the `show configuration context` command to display configuration information for a specified context.

Note: By appending a space followed by the pipe (|) character at the end of a `show` command, you can filter the output using a set of modifier keywords and arguments. For more information, see *Using the CLI*.

1.45.6 Examples

The following example displays configuration information for the `local` context:



```
[local]Ericsson#show configuration context local
Building configuration...
```

Current configuration:

```
!
no ip domain-lookup
!
interface mgmt
  ip address 10.12.210.37/21
!
!
logging console
!
enable encrypted 1 $1$.....$kvQfdsjs0ACFMeDHQ7n/o.
!
!
user test encrypted 1 $1$.....$kvQfdsjs0ACFMeDHQ7n/o.
!
!
ip route 10.12.0.0/10.210.12.208.1 cost 1 permanent
ip route 10.13.0.0/10.210.12.208.1 cost 1 permanent
!!
!
end
```

1.46 show configuration dhcp

show configuration dhcp

1.46.1 Purpose

Displays the current Dynamic Host Configuration Protocol (DHCP) configuration for the context.

1.46.2 Command Mode

All modes (10)



1.46.3 Syntax Description

This command has no keywords or arguments.

1.46.4 Default

None

1.46.5 Usage Guidelines

Use the `show configuration dhcp` command to display the current DHCP configuration for the context.

Note: By default, most `show` commands (in any mode) display information for the current context only or, depending on the command syntax, for all contexts. If you are an administrator for the local context, you can insert the optional `context ctx-name` construct, preceding the `show` command, to view output for the specified context without entering that context. For more information about using the `context ctx-name` construct, see the `context` command description.

Note: By appending a space followed by the pipe (|) character at the end of a `show` command, you can filter the output using a set of modifier keywords and arguments. For more information, see *Using the CLI*.

1.46.6 Examples

The following example displays a DHCP proxy configuration:



```
Current configuration:
!
context non-subscriber
!
!
interface non-subscriber multibind
  ip address 100.1.1.1/16
  dhcp proxy 1000
!
interface to-dhcp-server
  ip address 108.1.1.1/24
!
interface vlan.1 multibind
  ip address 121.1.1.1/24
  dhcp proxy 250
!
interface vlan.10 multibind
  ip address 130.1.1.1/24
  dhcp proxy 250
!
dhcp relay server 108.1.1.156
dhcp relay option
!
! ** End Context **
!
!
!
port ethernet 9/2
no shutdown
encapsulation dot1q
dot1q pvc 1
  bind interface vlan.1 non-subscriber
dot1q pvc 10
  bind interface vlan.10 non-subscriber
dot1q pvc 11 encaps multi
  bind interface non-subscriber non-subscriber
dot1q pvc 12 encaps multi
  bind interface non-subscriber non-subscriber
dot1q pvc 13 encaps multi
  bind interface non-subscriber non-subscriber
dot1q pvc 14 encaps multi
  bind interface non-subscriber non-subscriber
dot1q pvc 15 encaps multi
  bind interface non-subscriber non-subscriber
!
end
```

1.47 show configuration dhcpv6

show configuration dhcpv6 [all-contexts]

1.47.1 Purpose

Displays the current Dynamic Host Configuration Protocol version 6 (DHCPv6) configuration for the current context or all contexts.

1.47.2 Command Mode

All modes (10)



1.47.3 Syntax Description

all-contexts Displays the DHCPv6 configuration for all contexts.

1.47.4 Default

None

1.47.5 Usage Guidelines

Use the **show configuration dhcpv6** command to display the current DHCPv6 configuration for the current context or all contexts.

Note: By default, most **show** commands (in any mode) display information for the current context only or, depending on the command syntax, for all contexts. If you are an administrator for the local context, you can insert the optional **context ctx-name** construct, preceding the **show** command, to view output for the specified context without entering that context. For more information about using the **context ctx-name** construct, see the **context** command description.

Note: By appending a space followed by the pipe (|) character at the end of a **show** command, you can filter the output using a set of modifier keywords and arguments. For more information, see *Using the CLI*.

1.47.6 Examples

The following example displays a DHCPv6 configuration:

```
[local]Ericsson#show configuration dhcpv6
Building configuration...

Current configuration:

!
context local
!
  dhcpv6 server
!
! ** End Context **
!
end
```

1.48 show configuration dpi

show configuration dpi [all-contexts]



1.48.1 Purpose

Displays the current Deep Packet Inspection (DPI) configuration for the current context or all contexts.

1.48.2 Command Mode

All modes (10)

1.48.3 Syntax Description

`all-contexts` Displays the DPI configuration for all contexts.

1.48.4 Default

None

1.48.5 Usage Guidelines

Use the `show configuration dpi` command to display the current DPI configuration for the current context or all contexts.

Note: By default, most `show` commands (in any mode) display information for the current context only or, depending on the command syntax, for all contexts. If you are an administrator for the local context, you can insert the optional `context ctx-name` construct, preceding the `show` command, to view output for the specified context without entering that context. For more information about using the `context ctx-name` construct, see the `context` command description.

Note: By appending a space followed by the pipe (`|`) character at the end of a `show` command, you can filter the output using a set of modifier keywords and arguments. For more information, see *Using the CLI*.

1.48.6 Examples

The following example displays a DPI configuration:



```
[local]Ericsson#show configuration dpi
Building configuration...

Current configuration:
!
dpi qos profile q1
    rate 1000000 burst 10000000
    exceed mark precedence 3
!
dpi qos profile remark
    mark dscp 18
!
dpi traffic-management protocol http escape-conversion
!
!
dpi access-list acl1
    seq 10 application netbios class NETBIOS
    seq 20 application bit-torrent class BITTORRENT
    seq 30 application gnutella class GNUTELLA
    seq 40 application http class WEB
!
dpi traffic-management action policy ap1
    default-class def
    class BITTORRENT
    class GNUTELLA
    class NETBIOS
    class WEB
!
!
!
!
!
!
!
!
!
!
dpi traffic-management statistics
!
!
dpi traffic-management policy p1
    action policy ap1
    access-group acl1
    statistics class
    statistics protocol
!
!
!
!
!
end
[local]Ericsson#
```

1.49 show configuration flow

show configuration flow

1.49.1 Purpose

Displays all flow admission control (FAC) profiles and all circuits to which FAC profiles have been applied on the current SmartEdge router.

1.49.2 Command Mode

All modes



1.49.3 Syntax Description

This command has no keywords or arguments.

1.49.4 Default

None

1.49.5 Usage Guidelines

Use the `show configuration flow` command to display all FAC profiles and all circuits to which FAC profiles have been applied on the current SmartEdge router.

Note: By default, most `show` commands (in any mode) display information for the current context only or, depending on the command syntax, for all contexts. If you are an administrator for the local context, you can insert the optional `context ctx-name` construct, preceding the `show` command, to view output for the specified context without entering that context. For more information about using the `context ctx-name` construct, see the `context` command description.

Note: By appending a space followed by the pipe (|) character at the end of a `show` command, you can filter the output using a set of modifier keywords and arguments. For more information, see *Using the CLI*.

1.49.6 Examples

The following example shows how to display all FAC profiles (f1, f2, and f3) associated with the dot1q pvc 1, dotq pvc 2, and dot1q pvc 3 circuits, respectively:



```
[local]Ericsson(config)#show configuration flow
Building configuration...
Current configuration:
flow admission-control profile "f1"
flow admission-control profile "f2"
flow admission-control profile "f3"
!
!
card ge-10-port 1
port ethernet 1/1
dot1q pvc 1
flow apply admission-control profile "f2" out
dot1q pvc 2
flow apply admission-control profile "f3" in
dot1q pvc 5
flow apply admission-control profile "f3" bidirectional
```

The following example shows how to apply a FAC profile that applies to incoming traffic that matches the `f1` string:

```
[local]Ericsson(config-flow)#show configuration flow | in f1
flow admission-control profile f1
```

1.50 show configuration forward

show configuration forward [*policy policy-name*]

1.50.1 Purpose

Displays the configuration of forward policies.

1.50.2 Command Mode

All modes (10)

1.50.3 Syntax Description

<i>policy-name</i>	Specifies the policy for which configuration information is shown.
--------------------	--



1.50.4 Default

None

1.50.5 Usage Guidelines

Use the `show configuration forward` command to display the configuration of all forward policies or a specified policy.

Note: By default, most `show` commands display information for the current context only or, depending on the command syntax, for all contexts. If you are an administrator for the local context, you can precede the `show` command with the `context ctx-name` construct to view output for the specified context without entering that context. For more information about the `context ctx-name` construct, see the `context` command description.

Note: You can filter the output by adding a space followed by a pipe (`|`) to the `show` command and then listing the modifier keywords and arguments. For more information, see *Using the CLI*.

1.50.6 Examples

The following example displays the policy-based forwarding commands for the current configuration:



```
[local]Ericsson>show configuration forward
```

```
Building configuration...
```

```
Current configuration:
```

```
!
!
context local
!

!
forward policy Demo
  redirect destination ip next-hop 2.5.0.2
  redirect destination ipv6 next-hop 2:5::2
  ip access-group acl-demo-ipv4 local
  ipv6 access-group acl-demo-ipv6 local

class red1
  redirect destination ip next-hop 3.5.0.4 default 2.5.0.2
class red2
  redirect destination ipv6 next-hop 2:4::6
class red3
  redirect destination ipv6 next-hop 3:4::5 2:6::2
!
card 10ge-4-port 2
port ethernet 2/2
  encapsulation dot1q
  dot1q pvc 1
  bind interface i22 local
  forward policy Demo in
!
```

The following example displays the policy-based forwarding commands for a specified policy with IP and IPv6 addresses:

```
[local]Ericsson(config-policy-group)#show forward policy Demo
Policy-Name      Type      Grid      Qs Slots  Ports  Bound  DnLd
Status
test2            forward  1          0  0      0          updt

Slot#:           1    2    3    4    5    6    7    8    9   10   11   12   13   14
iPPA dnld:
ePPA dnld:
iPPA ports:
ePPA ports:

Class-Name      Action  Mode  IP-Addr/Option  Bound  Int,msec
Output-Name
Redirect1       redir   hop6  2001:0f68:::0202:B3FF:FE1E:8329
                2001:0f68:::0202:B3FF:FE1E:3333
Redirect2       redir   hop4  1.1.1.1
                1.1.1.2
                1.1.1.3
```

1.51 show configuration hr

show configuration hr



1.51.1 Purpose

Displays the current HTTP redirect configuration.

1.51.2 Command Mode

All modes (10)

1.51.3 Syntax Description

This command has no keywords or arguments.

1.51.4 Default

None

1.51.5 Usage Guidelines

Use the `show configuration hr` command to display the current HTTP redirect configuration.

Note: By default, most `show` commands (in any mode) display information for the current context only or, depending on the command syntax, for all contexts. If you are an administrator for the local context, you can insert the optional `context ctx-name` construct, preceding the `show` command, to view output for the specified context without entering that context. For more information about using the `context ctx-name` construct, see the `context` command description.

Note: By appending a space followed by the pipe (|) character at the end of a `show` command, you can filter the output using a set of modifier keywords and arguments. For more information, see *Using the CLI*.

1.51.6 Examples

The following example displays the current HTTP redirect configuration for the `local` context:



```
[local]Ericsson>show configuration hr
Building configuration...

Current configuration:
context local
!
http-redirect profile redirect
    url http://www.redirect-site.com
!
http-redirect server
```

1.52 show configuration igmp

`show configuration igmp`

1.52.1 Purpose

Displays the current Internet Group Management Protocol (IGMP) configuration information for the current context.

1.52.2 Command Mode

All modes (10)

1.52.3 Syntax Description

This command has no keywords or arguments.

1.52.4 Default

None

1.52.5 Usage Guidelines

Use the `show configuration igmp` command to display the current IGMP configuration for the current context.



Note: By default, most **show** commands (in any mode) display information for the current context only or, depending on the command syntax, for all contexts. If you are an administrator for the local context, you can insert the optional **context ctx-name** construct, preceding the **show** command, to view output for the specified context without entering that context. For more information about using the **context ctx-name** construct, see the **context** command description.

Note: By appending a space followed by the pipe (|) character at the end of a **show** command, you can filter the output using a set of modifier keywords and arguments. For more information, see *Using the CLI*.

1.52.6 Examples

The following example displays the active IGMP configuration in exec mode, where **fxp1** is an IGMP interface that has an IGMP-specific configuration, and where **lo1** and **fxp2** are active IGMP interfaces because Protocol Independent Multicast (PIM) has been configured on them:

```
[local]Ericsson#show configuration igmp
Current configuration: context local
!
interface fxp1
  igmp access-group group2
  igmp join-group 224.121.1.1
  igmp join-group 224.122.1.1
  igmp join-group 224.121.1.2
  igmp join-group 224.132.1.1
  igmp join-group 224.132.1.2
  igmp join-group 224.138.1.2
  igmp query-interval 300
  igmp robust 5
!
interface fxp2
!
interface lo1
```

1.53 show configuration isis

show configuration isis



1.53.1 Purpose

Displays the Intermediate System-to-Intermediate System (IS-IS) configuration information for the current context.

1.53.2 Command Mode

All modes (10)

1.53.3 Syntax Description

This command has no keywords or arguments.

1.53.4 Default

None

1.53.5 Usage Guidelines

Use the `show configuration isis` command to display the current IS-IS configuration for the current context.

Note: By default, most `show` commands (in any mode) display information for the current context only or, depending on the command syntax, for all contexts. If you are an administrator for the local context, you can insert the optional `context ctx-name` construct, preceding the `show` command, to view output for the specified context without entering that context. For more information about using the `context ctx-name` construct, see the `context` command description.

Note: By appending a space followed by the pipe (|) character at the end of a `show` command, you can filter the output using a set of modifier keywords and arguments. For more information, see *Using the CLI*. For information about how to troubleshoot IS-IS, see *Troubleshooting IS-IS*.

1.53.6 Examples

The following example displays the active IS-IS configuration in exec mode:

```
[local]Ericsson#show configuration isis
Building configuration...

Current configuration:
context ISIS_3
!
router isis 3
```



```
net 47.0001.1720.3100.0003.00
is type level-1-2
distance 115
metric-style wide
no set-overload-bit
no attached-bit ignore
no attached-bit never-set
no authentication level-1
no authentication level-2
no maximum redistribute
lsp gen-interval 10
lsp mtu 1497
lsp refresh-interval 900
lsp max-lifetime 1200
spf interval 10
spf holddown 5
maximum paths 8
no dynamic-hostname
restart graceful-time 30
fast-convergence
no traffic-engineering
address-family ipv4 unicast
no interarea-distribute 11-to-12
no interarea-distribute 12-to-11
!
interface 3
! bind to ethernet 10/3
circuit type level-1-2
csnp interval 10
no lsp block-flooding
hello interval 10
hello multiplier 3
hello padding first-only
lsp interval 33
no lsp receive-only-mode
no csnp periodic-on-ntp
priority 64
lsp retransmit-interval 5
```




```
no passive-interface
no disable-bfd
no authentication level-1
no authentication level-2
circuit mtu 1497
address-family ipv4 unicast
!
end
```

1.54 show configuration l2vpn

show configuration l2vpn

1.54.1 Purpose

Displays the Layer 2 Virtual Private Network (L2VPN)-related configuration information.

1.54.2 Command Mode

All modes (10)

1.54.3 Syntax Description

This command has no keywords or arguments.

1.54.4 Default

None

1.54.5 Usage Guidelines

Use the **show configuration l2vpn** command to display the L2VPN-related configuration information.

Note: By default, most **show** commands (in any mode) display information for the current context only or, depending on the command syntax, for all contexts. If you are an administrator for the local context, you can insert the optional **context *ctx-name*** construct, preceding the **show** command, to view output for the specified context without entering that context. For more information about using the **context *ctx-name*** construct, see the **context** command description.



Note: By appending a space followed by the pipe (|) character at the end of a `show` command, you can filter the output using a set of modifier keywords and arguments. For more information, see *Using the CLI*.

1.54.6 Examples

The following example displays the L2VPN-related configuration information in exec mode:

```
[local]Ericsson#show configuration l2vpn
Current configuration:
```

1.55 show configuration ldp

```
show configuration ldp
```

1.55.1 Purpose

Displays the Label Distribution Protocol (LDP) commands that are configured in the current context.

1.55.2 Command Mode

All modes

1.55.3 Syntax Description

This command has no keywords or arguments.

1.55.4 Default

None

1.55.5 Usage Guidelines

Use the `show configuration ldp` command to display the LDP commands that are configured in the current context.

1.55.6 Examples

The following example displays the LDP commands that are configured in the `local` context:



```
[local]Ericsson>show configuration ldp
Building configuration...
context local
!
l2vpn
l2vpn-cct-bindings static
xc 1/1 vpi-vci 0 20 vpn-label 5010 peer 1.1.1.1
xc 1/1 vpi-vci 0 21 vpn-label 5011 peer 1.1.1.1
xc 1/1 vpi-vci 0 22 vpn-label 5012 peer 1.1.1.1
xc 1/1 vpi-vci 0 23 vpn-label 5013 peer 1.1.1.1
xc 1/1 vpi-vci 0 24 vpn-label 5014 peer 1.1.1.1
xc 1/1 vpi-vci 0 25 vpn-label 5015 peer 1.1.1.1
xc 1/1 vpi-vci 0 26 vpn-label 5016 peer 1.1.1.1
xc 1/1 vpi-vci 0 27 vpn-label 5017 peer 1.1.1.1
xc 1/1 vpi-vci 0 28 vpn-label 5018 peer 1.1.1.1
xc 1/1 vpi-vci 0 29 vpn-label 5019 peer 1.1.1.1

Current configuration:
context local
!
router ldp
create-lsp-circuit
ecmp-transit
max-session 1100
!
end
```

1.56 show configuration mobile-ip

show configuration mobile-ip

1.56.1 Purpose

Displays the Mobile IP configuration.

1.56.2 Command Mode

All modes (10)

1.56.3 Syntax Description

This command has no keywords or arguments.

1.56.4 Default

None



1.56.5 Usage Guidelines

Use the `show configuration mobile-ip` command to display the Mobile IP configuration. This command displays the Mobile IP configuration in the current context only.

Note: By appending a space followed by the pipe (|) character at the end of a `show` command, you can filter the output using a set of modifier keywords and arguments. For more information, see *Using the CLI*.

1.56.6 Examples

The following example shows how to display a partial list of Mobile IP configuration commands:

```
[local]Ericsson#show configuration mobile-ip
Building configuration...

Current configuration:
context local
!
router mobile-ip
  foreign-agent
  advertise tunnel-type gre
  care-of-address to_ha
  care-of-address tun-peer-f2 tun-peer-ctx
  care-of-address tun-peer-if tun-peer-ctx
  home-agent-peer 1.1.1.1
  vpn-context hoa-ctx
interface to_mn
!
end
```

1.57 show configuration mpls

`show configuration mpls`

1.57.1 Purpose

Displays the current Multiprotocol Label Switching (MPLS) configuration information for the current context.



1.57.2 Command Mode

All modes (10)

1.57.3 Syntax Description

This command has no keywords or arguments.

1.57.4 Default

None

1.57.5 Usage Guidelines

Use the `show configuration mpls` command to display the current MPLS configuration for the current context.

Note: By default, most `show` commands (in any mode) display information for the current context only or, depending on the command syntax, for all contexts. If you are an administrator for the local context, you can insert the optional `context ctx-name` construct, preceding the `show` command, to view output for the specified context without entering that context. For more information about using the `context ctx-name` construct, see the `context` command description.

Note: By appending a space followed by the pipe (|) character at the end of a `show` command, you can filter the output using a set of modifier keywords and arguments. For more information, see *Using the CLI*.

1.57.6 Examples

The following example displays the active MPLS configuration in exec mode:

```
[local]Ericsson#show configuration mpls
Building configuration...
```

Current configuration:

```
context local
!
router mpls
  interface to-ingress
  interface to-egress
```

1.58 show configuration mpls-static

`show configuration mpls-static`



1.58.1 Purpose

Displays the current Multiprotocol Label Switching (MPLS) static configuration information for the current context.

1.58.2 Command Mode

All modes (10)

1.58.3 Syntax Description

This command has no keywords or arguments.

1.58.4 Default

None

1.58.5 Usage Guidelines

Use the `show configuration mpls-static` command to display the current MPLS static configuration for the current context.

Note: By default, most `show` commands (in any mode) display information for the current context only or, depending on the command syntax, for all contexts. If you are an administrator for the local context, you can insert the optional `context ctx-name` construct, preceding the `show` command, to view output for the specified context without entering that context. For more information about using the `context ctx-name` construct, see the `context` command description.

Note: By appending a space followed by the pipe (|) character at the end of a `show` command, you can filter the output using a set of modifier keywords and arguments. For more information, see *Using the CLI*.

1.58.6 Examples

The following example displays the active MPLS static configuration in exec mode:



```
[local]Ericsson#show configuration mpls-static
```

```
Building configuration...
```

```
Current configuration:
```

```
context local
```

```
!
```

```
router mpls-static
```

```
interface to-core
```

```
label-action 35 pop
```

```
lsp E-W-stat
```

```
egress 10.1.1.2
```

```
next-hop 10.2.1.1
```

```
out-label 135
```

1.59 show configuration msdp

```
show configuration msdp
```

1.59.1 Purpose

Displays the current Multicast Source Discovery Protocol (MSDP) configuration information for the current context.

1.59.2 Command Mode

All modes (10)

1.59.3 Syntax Description

This command has no keywords or arguments.

1.59.4 Default

None

1.59.5 Usage Guidelines

Use the `show configuration msdp` command to display the current MSDP configuration for the current context.



Note: By default, most **show** commands (in any mode) display information for the current context only or, depending on the command syntax, for all contexts. If you are an administrator for the local context, you can insert the optional **context** *ctx-name* construct, preceding the **show** command, to view output for the specified context without entering that context. For more information about using the **context** *ctx-name* construct, see the **context** command description.

Note: By appending a space followed by the pipe (|) character at the end of a **show** command, you can filter the output using a set of modifier keywords and arguments. For more information, see *Using the CLI*.

1.59.6 Examples

The following example displays an active MSDP configuration, in exec mode:

```
[local]Ericsson#show configuration msdp
Building configuration...

Current configuration:
context local
router msdp
  peer 10.200.1.2 local-tcp-source lo1
  no shutdown
  mesh-group mesh-a 10.200.1.2
```

1.60 show configuration nat

show configuration nat

1.60.1 Purpose

Displays the current Network Address Translation (NAT) configuration.

1.60.2 Command Mode

All modes (10)

1.60.3 Syntax Description

This command has no keywords or arguments.

1.60.4 Default

None



1.60.5 Usage Guidelines

Use the `show configuration nat` command to display the current NAT configuration.

Note: By default, most `show` commands (in any mode) display information for the current context only or, depending on the command syntax, for all contexts. If you are an administrator for the local context, you can insert the optional `context ctx-name` construct, preceding the `show` command, to view output for the specified context without entering that context. For more information about using the `context ctx-name` construct, see the `context` command description.

Note: By appending a space followed by the pipe (|) character at the end of a `show` command, you can filter the output using a set of modifier keywords and arguments. For more information, see *Using the CLI*.

1.60.6 Examples

The following example displays output from the `show configuration nat` command for a NAT policy:

```
[local]Ericsson#show configuration nat

Building configuration...

Current configuration:
!
context local
!
ip nat pool NAT_POOL1 napt
address 10.3.100.1 to 10.3.100.1
!
ip nat pool NAT_POOL2 napt
address 10.3.100.2/32 port-block 1 to 15
!
ip nat pool NAT_POOL3
address 10.3.100.3/32
address 10.3.100.31/32
address 10.3.100.42 to 10.3.100.52
!
context local
!
policy access-list NAT_ACL
```



```
seq 10 permit ip any host 10.3.51.5 class CLASS2
seq 20 permit ip any any class CLASS3
!
nat policy NAT_POLICY1
pool NAT_POOL1 local
access-group NAT_ACL
class CLASS2
pool NAT_POOL2 local
class CLASS3
drop
ip static in source 10.3.48.5 100.3.48.5
ip static in source 10.3.48.15 100.3.48.15
ip static in tcp source 10.3.49.5 2 100.3.49.5 2
!
interface e1
! bound to 3/1 circuit
ip address 10.3.49.2/24
ip nat NAT_POLICY1
```

1.61 show configuration nd

show configuration nd

1.61.1 Purpose

Displays the current Neighbor Discovery (ND) configuration.

1.61.2 Command Mode

All modes (10)

1.61.3 Syntax Description

This command has no keywords or arguments.

1.61.4 Default

None



1.61.5 Usage Guidelines

Use the `show configuration nd` command to display the current ND configuration.

Note: By default, most `show` commands (in any mode) display information for the current context only or, depending on the command syntax, for all contexts. If you are an administrator for the local context, you can insert the optional `context ctx-name` construct, preceding the `show` command, to view output for the specified context without entering that context. For more information about using the `context ctx-name` construct, see the `context` command description.

Note: By appending a space followed by the pipe (`|`) character at the end of a `show` command, you can filter the output using a set of modifier keywords and arguments. For more information, see *Using the CLI*.

1.61.6 Examples

The following example displays an ND configuration when only the ND router and its interface are configured:

```
[local]Ericsson>show configuration nd
Building configuration...

Current configuration:
context local
!
router nd
interface int1
!
end
```

1.62 show configuration ntp

`show configuration ntp`

1.62.1 Purpose

Displays the current Network Time Protocol (NTP) configuration.

1.62.2 Command Mode

All modes (10)



1.62.3 Syntax Description

This command has no keywords or arguments.

1.62.4 Default

None

1.62.5 Usage Guidelines

Use the `show configuration ntp` command to display the current NTP configuration.

Note: By default, most `show` commands (in any mode) display information for the current context only or, depending on the command syntax, for all contexts. If you are an administrator for the local context, you can insert the optional `context ctx-name` construct, preceding the `show` command, to view output for the specified context without entering that context. For more information about using the `context ctx-name` construct, see the `context` command description.

Note: By appending a space followed by the pipe (|) character at the end of a `show` command, you can filter the output using a set of modifier keywords and arguments. For more information, see *Using the CLI*.

1.62.6 Examples

The following example displays the current NTP configuration:

```
[local]Ericsson(config-ctx)#show configuration ntp
Building configuration...
```

```
Current configuration:
```

```
!
!
!
context isp202

!
 ntp-mode

server-mode
!
  server 1.1.1.2 version 3 source ntp
  peer 1.1.1.5 version 3 source ntp
  peer 1.1.1.6 version 3 source ntp
  peer 1.1.1.7 version 3 source ntp

interface ntp
 ntp-broadcast delay 3000
!
! ** End Context **
!
end
```



1.63 show configuration ospf

`show configuration ospf`

1.63.1 Purpose

Displays the current Open Shortest Path First (OSPF) configuration information for the current context.

1.63.2 Command Mode

All modes (10)

1.63.3 Syntax Description

This command has no keywords or arguments.

1.63.4 Default

None

1.63.5 Usage Guidelines

Use the `show configuration ospf` command to display the current OSPF router configuration information for the current context.

Note: By default, most `show` commands display information for the current context only or, depending on the command syntax, for all contexts. If you are an administrator for the local context, you can precede the `show` command with the `context ctx-name` construct to view output for the specified context without entering that context. For more information, see the `context` command description.

Note: To filter the output, at the end of a `show` command, append a space followed by a pipe (`|`) and the keywords and arguments for filtering. For more information, see *Using the CLI*.

1.63.6 Examples

The following example displays the active OSPF configuration in exec mode:



```
[local]Ericsson#show configuration ospf
Building configuration...

Current configuration:
context local
!
router ospf 1
  spf-timers 1 1
  log-neighbor-up-down
  mpls traffic-engineering
  area 0.0.0.0
    interface one
      fast-hello count-per-second 5
    interface two
    interface three
    interface lol
  redistribute connected
```

1.64 show configuration ospf3

show configuration ospf3

1.64.1 Purpose

Displays the current Open Shortest Path First v3 (OSPF3) configuration information for the current context.

1.64.2 Command Mode

All modes (10)

1.64.3 Syntax Description

This command has no keywords or arguments.

1.64.4 Default

None



1.64.5 Usage Guidelines

Use the `show configuration ospf3` command to display the current OSPF router configuration information for the current context.

Note: By default, most `show` commands (in any mode) display information for the current context only or, depending on the command syntax, for all contexts. If you are an administrator for the local context, you can insert the optional `context ctx-name` construct, preceding the `show` command, to view output for the specified context without entering that context. For more information about using the `context ctx-name` construct, see the `context` command description.

Note: By appending a space followed by the pipe (|) character at the end of a `show` command, you can filter the output using a set of modifier keywords and arguments. For more information, see *Using the CLI*.

1.64.6 Examples

The following example displays the active OSPF3 configuration in exec mode:

```
[local]Ericsson#show conf ospf3
Building configuration...
```

```
Current configuration:
!
!
!
context o3_1
!
router ospf3 100
  area 0.0.0.0
  interface lp1
  interface tolister
  redistribute static
  redistribute ripng r1
!
! ** End Context **
!
end
```

1.65 show configuration pim

`show configuration pim`

1.65.1 Purpose

Displays the current Protocol Independent Multicast (PIM) configuration information for the current context.



1.65.2 Command Mode

All modes (10)

1.65.3 Syntax Description

This command has no keywords or arguments.

1.65.4 Default

None

1.65.5 Usage Guidelines

Use the `show configuration pim` command to display the current PIM configuration for the current context.

Note: By default, most `show` commands (in any mode) display information for the current context only or, depending on the command syntax, for all contexts. If you are an administrator for the local context, you can insert the optional `context ctx-name` construct, preceding the `show` command, to view output for the specified context without entering that context. For more information about using the `context ctx-name` construct, see the `context` command description.

Note: By appending a space followed by the pipe (|) character at the end of a `show` command, you can filter the output using a set of modifier keywords and arguments. For more information, see *Using the CLI*.

1.65.6 Examples

The following example displays the active PIM configuration in exec mode:



```
[local]Ericsson#show configuration pim
```

Current configuration:

```
context local
!
interface fxp1
pim sparse-mode
pim hello-interval 40
pim dr-priority 2
pim neighbor-filterdomainx
!
interface fxp2
pim sparse-mode
!
interface lol
pim sparse-mode
!
pim rp-address 10.200.1.2
```

1.66 show configuration policy (ACL)

```
show configuration policy
```

1.66.1 Purpose

Displays the policy access control list (ACL) configuration.

1.66.2 Command Mode

All modes (10)

1.66.3 Syntax Description

This command has no keywords or arguments.

1.66.4 Default

None



1.66.5 Usage Guidelines

Use the `show configuration policy` command to display the policy ACL configuration.

Note: By default, most `show` commands (in any mode) display information for the current context only or, depending on the command syntax, for all contexts. If you are an administrator for the local context, you can insert the optional `context ctx-name` construct, preceding the `show` command, to view output for the specified context without entering that context. For more information about using the `context ctx-name` construct, see the `context` command description.

Note: By appending a space followed by the pipe (`|`) character at the end of a `show` command, you can filter the output using a set of modifier keywords and arguments. For more information, see *Using the CLI*.

1.66.6 Examples

The following example displays output from the `show configuration policy` command:

```
[local]Ericsson#show configuration policy
```

```
Building configuration...
```

```
Current configuration:
```

```
context local
```

```
!
```

```
ip access-list ip-acl-2
```

```
    seq 10 permit ospf any
```

```
!
```

```
ip access-list ipacl
```

```
    seq 10 permit ip any
```

```
!
```

```
policy access-list qos-acl
```

```
    description qos acl
```

```
    seq 10 permit ip any any class qos-class
```

```
    seq 20 permit igmp any class qos-class
```

```
!
```

```
end
```

1.67 show configuration policy

```
show configuration policy
```



1.67.1 Purpose

Displays the routing policy configuration information for the current context.

1.67.2 Command Mode

All modes (10)

1.67.3 Syntax Description

This command has no keywords or arguments.

1.67.4 Default

None

1.67.5 Usage Guidelines

Use the `show configuration policy` command to display the current routing policy configuration for the current context.

Note: By default, most `show` commands (in any mode) display information for the current context only or, depending on the command syntax, for all contexts. If you are an administrator for the local context, you can insert the optional `context ctx-name` construct, preceding the `show` command, to view output for the specified context without entering that context. For more information about using the `context ctx-name` construct, see the `context` command description.

Note: By appending a space followed by the pipe (|) character at the end of a `show` command, you can filter the output using a set of modifier keywords and arguments. For more information, see *Using the CLI*.

1.67.6 Examples

The following example displays the active routing policy configuration in exec mode:



```
[local]Ericsson#show configuration policy
Building configuration...

Current configuration:
context local
!
  ip prefix-list deny-private
    seq 10 deny 10.0.0.0/8 le 32
    seq 20 deny 172.16.0.0/12 le 32
    seq 30 deny 192.168.0.0/16 le 32
    seq 40 permit 0.0.0.0/0 le 32
  !
  community-list tier-one-customers
    seq 10 permit local-as
  !
  route-map customer-george deny 20
    match ip address prefix-list deny-private
  route-map customer-george permit 30
    match community-list tier-one-customers
    set traffic-index 1
```

1.68 show configuration qos

show configuration qos

1.68.1 Purpose

Displays the current quality of service (QoS) configuration.

1.68.2 Command Mode

All modes (10)

1.68.3 Syntax Description

This command has no keywords or arguments.

1.68.4 Default

None



1.68.5 Usage Guidelines

Use the `show configuration qos` command to display the current QoS configuration.

Note: By default, most `show` commands (in any mode) display information for the current context only or, depending on the command syntax, for all contexts. If you are an administrator for the local context, you can insert the optional `context ctx-name` construct, preceding the `show` command, to view output for the specified context without entering that context. For more information about using the `context ctx-name` construct, see the `context` command description.

Note: By appending a space followed by the pipe (`|`) character at the end of a `show` command, you can filter the output using a set of modifier keywords and arguments. For more information, see *Using the CLI*.

1.68.6 Examples

The following example displays the QoS commands for the current, running configuration:



```
[local]Ericsson#show configuration qos

Building configuration...
Current configuration:
context local
!
qos policy mypolpolicy policing
  rate 50000 burst 10000 counters
  conform mark dscp af41
  exceed mark dscp af43
!
qos policy mypqpolicy pwfq
  max queue depth 4064 and max queue number 8
  num-queues 4
  queue 0 rate 1000 burst 15000
  queue 1 depth packets 4000
  queue 1 red probability 1 weight 6 min-threshold 500
max-threshold 3500
!
port ethernet 1/2
  dot1q pvc 1
  qos policy mypqpolicy out
  qos policy mypolpolicy in
!
port ethernet 1/3
  qos policy mypqpolicy out
!
```

The following example displays the QoS commands for the current configuration. The QoS access control list (ACL) named `qosacl` identifies four classes of packets: `voip`, `vod`, `stream`, and `besteffort`. The QoS policing policy named `acl-classification` uses the access group named `qosacl` to apply the QoS ACL classification and marks each class with a DSCP value of `cs7`, `cs5`, `cs3`, and `df`, respectively. Classification and prioritization are applied to incoming traffic on the specified Ethernet port:



```
[local]Ericsson#show configuration qos
```

```
Building configuration...
```

```
Current configuration:
```

```
context local
!
policy access-list qosacl
  seq 10 permit udp host 10.1.1.1 class voip
  seq 20 permit udp host 15.1.1.1 class vod
  seq 30 permit udp host 20.1.1.1 class stream
  seq 40 permit ip any any class besteffort
!
qos policy acl-classification policing
access-group qosacl1 local
  class voip
    mark dscp cs7
  class vod
    mark dscp cs5
  class stream
    mark dscp cs3
  class besteffort
    mark dscp df
!
port ethernet 1/2
  dot1q pvc 1
  qos policy acl-classification in
```

1.69 show configuration rip

```
show configuration rip [all-contexts]
```

1.69.1 Purpose

Displays the current Routing Information Protocol (RIP) and RIP next generation (RIPng) configuration information for the router.

1.69.2 Command Mode

All modes (10)



1.69.3 Syntax Description

all-contexts Optional. Displays RIP and RIPvng configuration information for all contexts.

1.69.4 Default

None

1.69.5 Usage Guidelines

Use the **show configuration rip** command to display the current RIP and RIPvng configuration for the current context.

Enter the **show configuration rip** command without the optional **all-contexts** keyword to display RIP and RIPvng information for the current context only.

Note: By appending a space followed by the pipe (|) character at the end of a **show** command, you can filter the output using a set of modifier keywords and arguments. For more information, see *Using the CLI*.

1.69.6 Examples

The following example displays the active RIP configuration in exec mode (in this example, only RIP is configured):



```
[local]Ericsson#show configuration rip
Building configuration...

Current configuration:
context local
!
interface toJuniper
  rip router backbone
!
interface toMpls3
  rip router edge
!
router rip edge
  default-information originate
  redistribute static metric 10
!
router rip backbone
  distribute-list prefixList1 out toJuniper
```

1.70 show configuration ripng

show configuration ripng [all-contexts]

1.70.1 Purpose

Displays the current RIP and RIPng next generation (RIPng) configuration information for the router.

1.70.2 Command Mode

All modes (10)

1.70.3 Syntax Description

all-contexts Optional. Displays RIP and RIPng configuration information for all contexts.

1.70.4 Default

None



1.70.5 Usage Guidelines

Use the `show configuration ripng` command to display the current RIP and RIPng configuration for the router.

Enter the `show configuration ripng` command without the optional `all-contexts` keyword to display RIP and RIPng information for the current context only.

Note: By appending a space followed by the pipe (|) character at the end of a `show` command, you can filter the output using a set of modifier keywords and arguments. For more information, see *Using the CLI*.

1.70.6 Examples

The following example displays the active RIPng configuration in exec mode (in this example, only RIPng is configured):

```
[local]Ericsson#show configuration ripng

[Building configuration...]

Current configuration:
!
!
!
context A
!
  router ripng 1
    redistribute static
    interface toB
!
! ** End Context **
!
end
```

1.71 show configuration rsvp

`show configuration rsvp`

1.71.1 Purpose

Displays the current Resource Reservation Protocol (RSVP) configuration information for the current context.



1.71.2 Command Mode

All modes (10)

1.71.3 Syntax Description

This command has no keywords or arguments.

1.71.4 Default

None

1.71.5 Usage Guidelines

Use the `show configuration rsvp` command to display the current RSVP configuration for the current context.

Note: By default, most `show` commands (in any mode) display information for the current context only or, depending on the command syntax, for all contexts. If you are an administrator for the local context, you can insert the optional `context ctx-name` construct, preceding the `show` command, to view output for the specified context without entering that context. For more information about using the `context ctx-name` construct, see the `context` command description.

Note: By appending a space followed by the pipe (|) character at the end of a `show` command, you can filter the output using a set of modifier keywords and arguments. For more information, see *Using the CLI*.

1.71.6 Examples

The following example displays the active RSVP configuration in exec mode:



```
[local]Ericsson# show configuration rsvp
Building configuration...

Current configuration:
context local
!
router rsvp
 interface to-core
  explicit-route exp-rt1
   next-hop 10.1.1.1
   next-hop 10.2.1.2
 lsp W-E-lsp
  ingress 10.1.1.2
  egress 10.2.1.2
 shutdown
 lsp W-E-bkup backup-for W-E-lsp
```

1.72 show configuration snmp

show configuration snmp

1.72.1 Purpose

Displays configuration commands for the Simple Network Management Protocol (SNMP).

1.72.2 Command Mode

All modes (10)

1.72.3 Syntax Description

This command has no keywords or arguments.

1.72.4 Default

None



1.72.5 Usage Guidelines

Use the `show configuration snmp` command to display configuration commands for SNMP (in exec mode).

Note: By default, most `show` commands (in any mode) display information for the current context only or, depending on the command syntax, for all contexts. If you are an administrator for the local context, you can insert the optional `context ctx-name` construct, preceding the `show` command, to view output for the specified context without entering that context. For more information about using the `context ctx-name` construct, see the `context` command description.

Note: By appending a space followed by the pipe (`|`) character at the end of a `show` command, you can filter the output using a set of modifier keywords and arguments. For more information, see *Using the CLI*.

1.72.6 Examples

The following example displays configuration commands for SNMP (in exec mode):



```
[local]Ericsson#show configuration snmp
Building configuration...

Current configuration:
!
snmp server
snmp engine-id local 80:00:09:30:80:00:0a:0d:31:41:00:a1
snmp engine-id remote victory 00:00:00:63:00:01:3b:39:9b:35:be:6e
snmp view all internet included
snmp community public view all read-write
snmp group group1 read all
snmp group group4 security-model usm auth read all write all notify all
snmp user user4 engine victory group group4 security-model usm md5 key encoded
base64 GFgDL/oidcHnbg7feQxOUQ==
snmp user user4 group group4 security-model usm md5 key encoded base64
GFgDL/oidcHnbg7feQxOUQ==
snmp target viewpoint 155.51.31.81 port 15162 security-name user4 version 3
security-
level auth group group4 view all
rmon alarm 10 ipForwDatagrams.0 60 delta rising-threshold 3000000 1
falling-threshold 600000 2
rmon alarm 20 rbnCpuMeterOneMinuteAvg.0 5 absolute rising-threshold 50 3
falling-
threshold 10 4 owner alarmDel6
rmon event 1 log notify owner gold.isp.net description "packets per second too
high in context gold.isp.net"
rmon event 2 log notify owner gold.isp.net description "packets per second is
below 10000 in context gold.isp.net"
rmon event 3 log notify owner gold.isp.net description "One minute average CPU
usage on the device is above 50%"
rmon event 4 log notify owner gold.isp.net description "One minute average CPU
usage on the device is now below 10%"
!
end
```

1.73 show configuration sse

show configuration sse



1.73.1 Command Mode

All modes

1.73.2 Usage Guidelines

Displays the current configuration of all SSE groups on the system.

1.73.3 Examples

```
[local]Ericsson#show configuration sse
Building configuration...

Current configuration:
!
sse group grp1 network-redundant
  partition ptn1 size 2 disk 1
  partition ptn2 size 2 disk 1 non-mirror
!
card sse 2
  bind sse group grp1
!
card sse 5
  bind sse group grp1 secondary
!
end
```

1.74 show configuration static

```
show configuration static
```

1.74.1 Purpose

Displays the current static route configuration information for the current context.

1.74.2 Command Mode

All modes (15)

1.74.3 Syntax Description

This command has no keywords or arguments.

1.74.4 Default

None



1.74.5 Usage Guidelines

Use the `show configuration static` command to display the current static route configuration for the current context.

Note: By default, most `show` commands (in any mode) display information for the current context only or, depending on the command syntax, for all contexts. If you are an administrator for the local context, you can insert the optional `context ctx-name` construct, preceding the `show` command, to view output for the specified context without entering that context. For more information about using the `context ctx-name` construct, see the `context` command description.

Note: By appending a space followed by the pipe (|) character at the end of a `show` command, you can filter the output using a set of modifier keywords and arguments. For more information, see *Using the CLI*.

1.74.6 Examples

The following example displays the active static route configuration in exec mode:

```
[local]Ericsson#show configuration static
Building configuration...

Current configuration:
context local
!
ip route 10.12.0.0/16 10.12.208.1 cost 1 permanent
ip route 155.53.0.0/16 10.12.208.1 cost 1 permanent
```

1.75 show context

`show context [{ctx-name | all}]`

1.75.1 Purpose

Displays a list of configured contexts.

1.75.2 Command Mode

All modes



1.75.3 Syntax Description

<code>ctx-name</code>	Optional. Name of an existing context or domain alias of an existing context.
<code>all</code>	Optional. Displays information for all contexts.

1.75.4 Default

Displays the current context.

1.75.5 Usage Guidelines

Use the `show context` command to display a list of configured contexts. When used without the optional `ctx-name` argument, the command displays only the current context. When used with the optional `all` keyword, a list of all configured contexts is displayed (domain aliases are not included in the display).

If the value of the `ctx-name` argument is a domain alias, the command displays the domain alias of the context instead of its name.

Note: By appending a space followed by the pipe (|) character at the end of a `show` command, you can filter the output using a set of modifier keywords and arguments. For more information, see *Using the CLI*.

1.75.6 Examples

The following example shows the output when the `all` keyword is specified:

```
[local]Ericsson>show context all
```

Context Name	Context ID	VPN-RD	Description

local	0x40080001		
dacp	0x40080002		
peter	0x40080003		
allan	0x40080004		

The following example shows the output when the `ctx-name` argument is specified:



```
[local]Ericsson>show context peter
```

Context Name	Context ID	VPN-RD	Description

peter	0x40080003	110:100	

The following example shows the local context is displayed when no argument is specified:

```
[local]Ericsson>show context
```

Context Name	Context ID	VPN-RD	Description

local	0x40080001		

1.76 show crashfiles

show crashfiles

1.76.1 Purpose

Displays the size, location, and name of any crash files located on the system.

1.76.2 Command Mode

All modes (10)

1.76.3 Syntax Description

This command has no keywords or arguments.

1.76.4 Default

None

1.76.5 Usage Guidelines

Use the **show crashfiles** command to display the size, location, and name of any crash files located in the system. Files are placed in the /md directory in the /flash partition, or when a mass-storage device is included in the system,



the mass-storage device /md directory. Crash files are used by technical support to determine the cause of the failure.

This command does not display information about the crash files that have been transferred to a bulkstats receiver, which is a remote file server.

Note: By default, most **show** commands (in any mode) display information for the current context only or, depending on the command syntax, for all contexts. If you are an administrator for the local context, you can insert the optional **context** *ctx-name* construct, preceding the **show** command, to view output for the specified context without entering that context. For more information about using the **context** *ctx-name* construct, see the **context** command description.

Note: By appending a space followed by the pipe (|) character at the end of a **show** command, you can filter the output using a set of modifier keywords and arguments. For more information, see *Using the CLI*.

1.76.6 Examples

The following example lists the size, time, and name of a process crash file and its mini core dump crash file:

```
[local]Ericsson#show crashfiles
11277 Mar 31 12:25 /md/exec_cli_274.mini.core
4507048 Mar 31 12:25 /md/exec_cli_274.core
```

1.77 show cspf database

show cspf database [*link ip-address* | *node ip-address*] [*detail*]

1.77.1 Purpose

Displays information about the Constrained Shortest Path First (CSPF) database.

1.77.2 Command Mode

All modes

1.77.3 Syntax Description

link ip-address	Optional. IP address of a traffic engineering (TE) link.
node ip-address	Optional. IP address of a TE node.
detail	Optional. Displays detailed information about the CSPF database.



1.77.4 Default

Displays brief information about CSPF TE links and nodes if the **show cspf database** command is issued without any optional keywords.

1.77.5 Usage Guidelines

Use the **show cspf database** command to display information about the CSPF database.

Note: By default, most **show** commands (in any mode) display information for the current context only or, depending on the command syntax, for all contexts. If you are an administrator for the local context, you can insert the optional **context ctx-name** construct, preceding the **show** command, to view output for the specified context without entering that context. For more information about using the **context ctx-name** construct, see the **context** command description.

Note: By appending a space followed by the pipe (|) character at the end of a **show** command, you can filter the output using a set of modifier keywords and arguments. For more information, see *Using the CLI*.

1.77.6 Examples

The following example displays information about the CSPF database:

```
[local]Ericsson#show cspf database
Node ID 6.6.6.6
Link ID 5.5.5.6, type MULTI_ACCESS
Node ID 10.14.100.1
Link ID 5.5.5.6, type MULTI_ACCESS
```

The following example displays detailed information about the CSPF database:



```
[local]Ericsson#show cspf database detail

Node ID 6.6.6.6
Link ID 5.5.5.6, type MULTI_ACCESS
Local Interface Addresses [0] 5.5.5.6, [1] 0.0.0.0, [2] 0.0.0.0
Remote Interface Addresses [0] 0.0.0.0, [1] 0.0.0.0, [2] 0.0.0.0
TE Metric 20, Color 0x00000000
Bandwidth(kbps) MAX 100000, Max Reservable 100000
Unreserved [0] 100000 [1] 100000
[2] 100000 [3] 100000
[4] 100000 [5] 100000
[6] 100000 [7] 100000

Node ID 10.14.100.1
Link ID 5.5.5.6, type MULTI_ACCESS
Local Interface Addresses [0] 5.5.5.1, [1] 0.0.0.0, [2] 0.0.0.0
Remote Interface Addresses [0] 0.0.0.0, [1] 0.0.0.0, [2] 0.0.0.0
TE Metric 10, Color 0x00000000
Bandwidth(kbps) MAX 100000, Max Reservable 100000
Unreserved [0] 100000 [1] 100000
[2] 100000 [3] 100000
[4] 100000 [5] 100000
[6] 100000 [7] 100000
```

The following example displays information about the 10.14.100.1 node:

```
[local]Ericsson#show cspf database node 10.14.100.1

Node ID 10.14.100.1
Link ID 5.5.5.6, type MULTI_ACCESS
```

The following example displays detailed information about the 10.14.100.1 node:



```
[local]Ericsson#show cspf database node 10.14.100.1 detail
Node ID 10.14.100.1
Link ID 5.5.5.6, type MULTI_ACCESS
Local Interface Addresses [0] 5.5.5.1, [1] 0.0.0.0, [2] 0.0.0.0
Remote Interface Addresses [0] 0.0.0.0, [1] 0.0.0.0, [2] 0.0.0.0
TE Metric 10, Color 0x00000000
Bandwidth(kbps) MAX 100000, Max Reservable 100000
Unreserved [0] 100000 [1] 100000
[2] 100000 [3] 100000
[4] 100000 [5] 100000
[6] 100000 [7] 100000
```

The following example displays information about the 5.5.5.6 link:

```
[local]Ericsson#show cspf database link 5.5.5.6
Node ID 6.6.6.6
Link ID 5.5.5.6, type MULTI_ACCESS
```

The following example displays detail information about the 5.5.5.6 link:

```
[local]Ericsson#show cspf database link 5.5.5.6 detail
Node ID 6.6.6.6
Link ID 5.5.5.6, type MULTI_ACCESS
Local Interface Addresses [0] 5.5.5.6, [1] 0.0.0.0, [2] 0.0.0.0
Remote Interface Addresses [0] 0.0.0.0, [1] 0.0.0.0, [2] 0.0.0.0
TE Metric 20, Color 0x00000000
Bandwidth(kbps) MAX 100000, Max Reservable 100000
Unreserved [0] 100000 [1] 100000
[2] 100000 [3] 100000
[4] 100000 [5] 100000
[6] 100000 [7] 100000
```