```
ASW2#
ASW2#show running-config
Building configuration...

Current configuration : 3795 bytes
!
version 12.1
no service pad
service timestamps debug uptime
service timestamps log uptime
no service password-encryption
!
hostname ASW2
!
enable secret 5 $1$YjQA$8IZI6/8ArQFD/ct6OebrY.
!
ip subnet-zero
!
!
spanning-tree mode pvst
no spanning-tree optimize bpdu transmission
spanning-tree extend system-id
!
!
!
!
interface Port-channel1
 switchport trunk allowed vlan 20,200
 switchport mode trunk
 flowcontrol send off
!
interface Port-channel2
 switchport trunk allowed vlan 20,200
 switchport mode trunk
 flowcontrol send off
!
interface FastEthernet0/1
 switchport access vlan 20
 switchport mode access
 switchport port-security
 shutdown
 spanning-tree portfast
!
interface FastEthernet0/2
 switchport access vlan 20
 switchport mode access
 switchport port-security
 shutdown
 spanning-tree portfast
!
interface FastEthernet0/3
 switchport access vlan 20
 switchport mode access
 switchport port-security
```

```
 shutdown
 spanning-tree portfast
!
interface FastEthernet0/4
 switchport access vlan 20
 switchport mode access
 switchport port-security
 shutdown
 spanning-tree portfast
!
interface FastEthernet0/5
 switchport access vlan 20
 switchport mode access
 switchport port-security
 shutdown
 spanning-tree portfast
!
interface FastEthernet0/6
 switchport access vlan 20
 switchport mode access
 switchport port-security
 shutdown
 spanning-tree portfast
!
interface FastEthernet0/7
 switchport access vlan 20
 switchport mode access
 switchport port-security
 shutdown
 spanning-tree portfast
!
interface FastEthernet0/8
 switchport access vlan 20
 switchport mode access
 switchport port-security
 shutdown
 spanning-tree portfast
!
interface FastEthernet0/9
 switchport access vlan 20
 switchport mode access
 switchport port-security
 shutdown
 spanning-tree portfast
!
interface FastEthernet0/10
 switchport access vlan 20
 switchport mode access
 switchport port-security
 shutdown
 spanning-tree portfast
!
interface FastEthernet0/11
 switchport access vlan 20
```

```
 switchport mode access
 switchport port-security
 shutdown
 spanning-tree portfast
!
interface FastEthernet0/12
 switchport access vlan 20
 switchport mode access
 switchport port-security
 shutdown
 spanning-tree portfast
!
interface FastEthernet0/13
 switchport access vlan 20
 switchport mode access
 switchport port-security
 shutdown
 spanning-tree portfast
!
interface FastEthernet0/14
 switchport access vlan 20
 switchport mode access
 switchport port-security
 shutdown
 spanning-tree portfast
!
interface FastEthernet0/15
 switchport access vlan 20
 switchport mode access
 switchport port-security
 spanning-tree portfast
!
interface FastEthernet0/16
 switchport trunk allowed vlan 20,200
 switchport mode trunk
 channel-group 2 mode desirable
!
interface FastEthernet0/17
 switchport trunk allowed vlan 20,200
 switchport mode trunk
 channel-group 2 mode desirable
!
interface FastEthernet0/18
 switchport trunk allowed vlan 20,200
 switchport mode trunk
 channel-group 2 mode desirable
!
interface FastEthernet0/19
 switchport trunk allowed vlan 20,200
 switchport mode trunk
 channel-group 1 mode desirable
!
interface FastEthernet0/20
 switchport trunk allowed vlan 20,200
```

```
 switchport mode trunk
 channel-group 1 mode desirable
!
interface FastEthernet0/21
 switchport trunk allowed vlan 20,200
 switchport mode trunk
 channel-group 1 mode desirable
!
interface FastEthernet0/22
 switchport mode trunk
!
interface FastEthernet0/23
 switchport mode trunk
!
interface FastEthernet0/24
 switchport mode trunk
!
interface Vlan1
 no ip address
 no ip route-cache
 shutdown
!
interface Vlan200
 ip address 192.168.1.132 255.255.255.224
 no ip route-cache
!
ip http server
!
line con 0
 exec-timeout 0 0
 logging synchronous
line vty 0 4
 password cisco
 login
line vty 5 15
 password cisco
 login
!
!
end

ASW2#
```

```
ASW2#show ip interface brief
Interface               IP-Address      OK? Method Status
Protocol
Vlan1                   unassigned      YES NVRAM  administratively
down down
Vlan200                 192.168.1.132   YES NVRAM  up
up
FastEthernet0/1         unassigned      YES unset  administratively
down down
FastEthernet0/2         unassigned      YES unset  administratively
down down
FastEthernet0/3         unassigned      YES unset  administratively
down down
FastEthernet0/4         unassigned      YES unset  administratively
down down
FastEthernet0/5         unassigned      YES unset  administratively
down down
FastEthernet0/6         unassigned      YES unset  administratively
down down
FastEthernet0/7         unassigned      YES unset  administratively
down down
FastEthernet0/8         unassigned      YES unset  administratively
down down
FastEthernet0/9         unassigned      YES unset  administratively
down down
```

```
FastEthernet0/10              unassigned      YES unset  administratively
down down
FastEthernet0/11              unassigned      YES unset  administratively
down down
FastEthernet0/12              unassigned      YES unset  administratively
down down
FastEthernet0/13              unassigned      YES unset  administratively
down down
FastEthernet0/14              unassigned      YES unset  administratively
down down
FastEthernet0/15              unassigned      YES unset  down
down
FastEthernet0/16              unassigned      YES unset  up
up
FastEthernet0/17              unassigned      YES unset  up
up
FastEthernet0/18              unassigned      YES unset  up
up
FastEthernet0/19              unassigned      YES unset  up
up
FastEthernet0/20              unassigned      YES unset  up
up
FastEthernet0/21              unassigned      YES unset  up
up
FastEthernet0/22              unassigned      YES unset  down
down
FastEthernet0/23              unassigned      YES unset  down
down
FastEthernet0/24              unassigned      YES unset  down
down
Port-channel1                 unassigned      YES unset  up
up
Port-channel2                 unassigned      YES unset  up
up
ASW2#
```

```
ASW2#show processes cpu
CPU utilization for five seconds: 1%/0%; one minute: 2%; five minutes: 1%
  PID Runtime(ms)     Invoked      uSecs    5Sec    1Min    5Min TTY Process
    1          0           1          0   0.00%   0.00%   0.00%   0 Chunk
Manager
    2         16        1514         10   0.00%   0.00%   0.00%   0 Load Meter
    3        172          41       4195   0.00%   0.00%   0.00%   0 SpanTree
Helper
    4       2048         771       2656   0.00%   0.02%   0.00%   0 Check
heaps
    5          8           3       2666   0.00%   0.00%   0.00%   0 Pool
Manager
    6          4           2       2000   0.00%   0.00%   0.00%   0 Timers
    7         40           3      13333   0.00%   0.00%   0.00%   0 Entity MIB
API
    8         12        1892          6   0.00%   0.00%   0.00%   0 HC Counter
Timer
    9          0         132          0   0.00%   0.00%   0.00%   0 ARP Input
   10          0           2          0   0.00%   0.00%   0.00%   0 Net Input
   11          0           1          0   0.00%   0.00%   0.00%   0 Critical
Bkgnd
   12       2500        3530        708   0.00%   0.01%   0.00%   0 Net
Background
   13          4          43         93   0.00%   0.00%   0.00%   0 Logger
   14         64        7558          8   0.00%   0.00%   0.00%   0 TTY
Background
   15         76        7568         10   0.00%   0.00%   0.00%   0 Per-Second
Jobs
   16         36        1514         23   0.00%   0.01%   0.00%   0 Compute
load avg
   17       1032         127       8125   0.00%   0.01%   0.00%   0 Per-minute
Jobs
```

18	4	20	200	0.00%	0.00%	0.00%	0	AggMgr Process
19	0	2	0	0.00%	0.00%	0.00%	0	Calhoun Storm Co
20	652	189056	3	0.00%	0.01%	0.00%	0	Calhoun LED Proc
21	60332	15005	4020	0.73%	0.77%	0.77%	0	Calhoun Statisti
22	64	37803	1	0.00%	0.00%	0.00%	0	HMATM Learn proc
23	252	16	15750	0.00%	0.00%	0.00%	0	CalhounPM
24	320	37809	8	0.00%	0.03%	0.00%	0	Link Status Proc
25	28	37812	0	0.00%	0.00%	0.00%	0	Calhoun PHY Loop
26	0	1	0	0.00%	0.00%	0.00%	0	CalhounInsIpopti
27	0	1	0	0.00%	0.00%	0.00%	0	Calhoun DHCP Sno
28	1180	1804	654	0.00%	0.00%	0.00%	0	CDP Protocol
29	0	64	0	0.00%	0.00%	0.00%	0	DHCP Snooping
30	0	127	0	0.00%	0.00%	0.00%	0	IP Input
31	884	2698	327	0.00%	0.00%	0.00%	0	DTP Protocol
32	48	759	63	0.00%	0.00%	0.00%	0	Ethchnl
33	156	67	2328	0.00%	0.00%	0.00%	0	VLAN Manager
34	4	2	2000	0.00%	0.00%	0.00%	0	PI MATM Aging Pr
35	20	16	1250	0.00%	0.00%	0.00%	0	VMATM Callback
36	9964	15085	660	0.24%	0.04%	0.05%	0	Spanning Tree
37	64	7566	8	0.00%	0.00%	0.00%	0	UDLD
38	0	135	0	0.00%	0.00%	0.00%	0	Port- Security
39	4	2	2000	0.00%	0.00%	0.00%	0	DHCPD Receive
40	0	1	0	0.00%	0.00%	0.00%	0	HTTP Timer
41	0	1	0	0.00%	0.00%	0.00%	0	RARP Input
42	0	1	0	0.00%	0.00%	0.00%	0	TCP Timer
43	0	1	0	0.00%	0.00%	0.00%	0	TCP Protocols
44	0	1	0	0.00%	0.00%	0.00%	0	Socket Timers
45	8	16	500	0.00%	0.00%	0.00%	0	L2MM
46	224	633	353	0.00%	0.00%	0.00%	0	MRD
47	48	127	377	0.00%	0.00%	0.00%	0	IGMPSN
48	104	127	818	0.00%	0.00%	0.00%	0	IGMP Snooping Pr
49	236	633	372	0.00%	0.00%	0.00%	0	IGMP Snooping Re

```
 50       784       3232        242   0.00%  0.00%  0.00%   0 IP
Multicast Dat
 51         0          2          0   0.00%  0.00%  0.00%   0 L2TRACE
SERVER
 52         0         97          0   0.00%  0.00%  0.00%   0 Cluster L2
 53         4        757          5   0.00%  0.00%  0.00%   0 Cluster
RARP
 54       536       1707        314   0.00%  0.01%  0.00%   0 Cluster
Base
 55      1396        189       7386   0.73%  1.45%  0.38%   0 Exec
 56         0         64          0   0.00%  0.00%  0.00%   0 DHCPD
Timer
 57         0          2          0   0.00%  0.00%  0.00%   0 Router
Autoconf
 58         0          1          0   0.00%  0.00%  0.00%   0 Syslog
Traps
 59         0          2          0   0.00%  0.00%  0.00%   0 VTPMIB
EDIT BUFF
 60       236      11430         20   0.00%  0.00%  0.00%   0 PM
Callback
 61         8         37        216   0.00%  0.00%  0.00%   0 VTP Trap
Process
 62         8       2144          3   0.00%  0.00%  0.00%   0 DHCPD
Database
 63        56       7567          7   0.00%  0.00%  0.00%   0 Calhoun
EnvMon P
 64         0          2          0   0.00%  0.00%  0.00%   0 STP STACK
TOPOLO
 65         4          2       2000   0.00%  0.00%  0.00%   0 STP FAST
TRANSIT
 66         0          2          0   0.00%  0.00%  0.00%   0 STP STACK
TOPOLO
 67         0          2          0   0.00%  0.00%  0.00%   0 CSRT RAPID
TRANS
 69      1340       3396        394   0.00%  0.00%  0.00%   0 PAgP
ASW2#
```

```
ASW2#show interfaces
Vlan1 is administratively down, line protocol is down
  Hardware is CPU Interface, address is 0015.fab8.2880 (bia
0015.fab8.2880)
  MTU 1500 bytes, BW 1000000 Kbit, DLY 10 usec,
     reliability 255/255, txload 1/255, rxload 1/255
  Encapsulation ARPA, loopback not set
  ARP type: ARPA, ARP Timeout 04:00:00
  Last input never, output never, output hang never
  Last clearing of "show interface" counters never
  Input queue: 0/75/0/0 (size/max/drops/flushes); Total output drops: 0
  Queueing strategy: fifo
  Output queue: 0/40 (size/max)
  5 minute input rate 0 bits/sec, 0 packets/sec
  5 minute output rate 0 bits/sec, 0 packets/sec
     0 packets input, 0 bytes, 0 no buffer
     Received 0 broadcasts (0 IP multicast)
     0 runts, 0 giants, 0 throttles
     0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
     0 packets output, 0 bytes, 0 underruns
     0 output errors, 3 interface resets
     0 output buffer failures, 0 output buffers swapped out
Vlan200 is up, line protocol is up
  Hardware is CPU Interface, address is 0015.fab8.2880 (bia
0015.fab8.2880)
  Internet address is 192.168.1.132/27
  MTU 1500 bytes, BW 1000000 Kbit, DLY 10 usec,
     reliability 255/255, txload 1/255, rxload 1/255
  Encapsulation ARPA, loopback not set
  ARP type: ARPA, ARP Timeout 04:00:00
  Last input 02:03:23, output never, output hang never
```

```
     Last clearing of "show interface" counters never
     Input queue: 0/75/0/0 (size/max/drops/flushes); Total output drops: 0
     Queueing strategy: fifo
     Output queue: 0/40 (size/max)
     5 minute input rate 1000 bits/sec, 1 packets/sec
     5 minute output rate 10000 bits/sec, 2 packets/sec
        15289 packets input, 1295238 bytes, 0 no buffer
        Received 2 broadcasts (0 IP multicast)
        0 runts, 0 giants, 0 throttles
        0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
        16650 packets output, 10087614 bytes, 0 underruns
        0 output errors, 2 interface resets
        0 output buffer failures, 0 output buffers swapped out
FastEthernet0/1 is administratively down, line protocol is down
(disabled)
  Hardware is Fast Ethernet, address is 0015.fab8.2881 (bia
0015.fab8.2881)
  MTU 1500 bytes, BW 100000 Kbit, DLY 100 usec,
     reliability 255/255, txload 1/255, rxload 1/255
  Encapsulation ARPA, loopback not set
  Keepalive set (10 sec)
  Auto-duplex, Auto-speed, media type is 100BaseTX
  input flow-control is unsupported output flow-control is unsupported
  ARP type: ARPA, ARP Timeout 04:00:00
  Last input never, output 02:06:17, output hang never
  Last clearing of "show interface" counters never
  Input queue: 0/75/0/0 (size/max/drops/flushes); Total output drops: 0
  Queueing strategy: fifo
  Output queue: 0/40 (size/max)
  5 minute input rate 0 bits/sec, 0 packets/sec
  5 minute output rate 0 bits/sec, 0 packets/sec
     1 packets input, 64 bytes, 0 no buffer
     Received 0 broadcasts (0 multicast)
     0 runts, 0 giants, 0 throttles
     0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
     0 watchdog, 0 multicast, 0 pause input
     0 input packets with dribble condition detected
     1 packets output, 64 bytes, 0 underruns
     0 output errors, 0 collisions, 2 interface resets
     0 babbles, 0 late collision, 0 deferred
     0 lost carrier, 0 no carrier, 0 PAUSE output
     0 output buffer failures, 0 output buffers swapped out
FastEthernet0/2 is administratively down, line protocol is down
(disabled)
  Hardware is Fast Ethernet, address is 0015.fab8.2882 (bia
0015.fab8.2882)
  MTU 1500 bytes, BW 100000 Kbit, DLY 100 usec,
     reliability 255/255, txload 1/255, rxload 1/255
  Encapsulation ARPA, loopback not set
  Keepalive set (10 sec)
  Auto-duplex, Auto-speed, media type is 100BaseTX
  input flow-control is unsupported output flow-control is unsupported
  ARP type: ARPA, ARP Timeout 04:00:00
  Last input never, output 02:06:19, output hang never
```

```
   Last clearing of "show interface" counters never
   Input queue: 0/75/0/0 (size/max/drops/flushes); Total output drops: 0
   Queueing strategy: fifo
   Output queue: 0/40 (size/max)
   5 minute input rate 0 bits/sec, 0 packets/sec
   5 minute output rate 0 bits/sec, 0 packets/sec
      1 packets input, 64 bytes, 0 no buffer
      Received 0 broadcasts (0 multicast)
      0 runts, 0 giants, 0 throttles
      0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
      0 watchdog, 0 multicast, 0 pause input
      0 input packets with dribble condition detected
      1 packets output, 64 bytes, 0 underruns
      0 output errors, 0 collisions, 2 interface resets
      0 babbles, 0 late collision, 0 deferred
      0 lost carrier, 0 no carrier, 0 PAUSE output
      0 output buffer failures, 0 output buffers swapped out
FastEthernet0/3 is administratively down, line protocol is down
(disabled)
   Hardware is Fast Ethernet, address is 0015.fab8.2883 (bia
0015.fab8.2883)
   MTU 1500 bytes, BW 100000 Kbit, DLY 100 usec,
      reliability 255/255, txload 1/255, rxload 1/255
   Encapsulation ARPA, loopback not set
   Keepalive set (10 sec)
   Auto-duplex, Auto-speed, media type is 100BaseTX
   input flow-control is unsupported output flow-control is unsupported
   ARP type: ARPA, ARP Timeout 04:00:00
   Last input never, output 02:06:21, output hang never
   Last clearing of "show interface" counters never
   Input queue: 0/75/0/0 (size/max/drops/flushes); Total output drops: 0
   Queueing strategy: fifo
   Output queue: 0/40 (size/max)
   5 minute input rate 0 bits/sec, 0 packets/sec
   5 minute output rate 0 bits/sec, 0 packets/sec
      1 packets input, 64 bytes, 0 no buffer
      Received 0 broadcasts (0 multicast)
      0 runts, 0 giants, 0 throttles
      0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
      0 watchdog, 0 multicast, 0 pause input
      0 input packets with dribble condition detected
      1 packets output, 64 bytes, 0 underruns
      0 output errors, 0 collisions, 2 interface resets
      0 babbles, 0 late collision, 0 deferred
      0 lost carrier, 0 no carrier, 0 PAUSE output
      0 output buffer failures, 0 output buffers swapped out
FastEthernet0/4 is administratively down, line protocol is down
(disabled)
   Hardware is Fast Ethernet, address is 0015.fab8.2884 (bia
0015.fab8.2884)
   MTU 1500 bytes, BW 100000 Kbit, DLY 100 usec,
      reliability 255/255, txload 1/255, rxload 1/255
   Encapsulation ARPA, loopback not set
   Keepalive set (10 sec)
```

```
   Auto-duplex, Auto-speed, media type is 100BaseTX
   input flow-control is unsupported output flow-control is unsupported
   ARP type: ARPA, ARP Timeout 04:00:00
   Last input never, output 02:06:22, output hang never
   Last clearing of "show interface" counters never
   Input queue: 0/75/0/0 (size/max/drops/flushes); Total output drops: 0
   Queueing strategy: fifo
   Output queue: 0/40 (size/max)
   5 minute input rate 0 bits/sec, 0 packets/sec
   5 minute output rate 0 bits/sec, 0 packets/sec
      1 packets input, 64 bytes, 0 no buffer
      Received 0 broadcasts (0 multicast)
      0 runts, 0 giants, 0 throttles
      0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
      0 watchdog, 0 multicast, 0 pause input
      0 input packets with dribble condition detected
      1 packets output, 64 bytes, 0 underruns
      0 output errors, 0 collisions, 2 interface resets
      0 babbles, 0 late collision, 0 deferred
      0 lost carrier, 0 no carrier, 0 PAUSE output
      0 output buffer failures, 0 output buffers swapped out
FastEthernet0/5 is administratively down, line protocol is down
(disabled)
  Hardware is Fast Ethernet, address is 0015.fab8.2885 (bia
0015.fab8.2885)
  MTU 1500 bytes, BW 100000 Kbit, DLY 100 usec,
     reliability 255/255, txload 1/255, rxload 1/255
  Encapsulation ARPA, loopback not set
  Keepalive set (10 sec)
  Auto-duplex, Auto-speed, media type is 100BaseTX
  input flow-control is unsupported output flow-control is unsupported
  ARP type: ARPA, ARP Timeout 04:00:00
  Last input never, output 02:06:24, output hang never
  Last clearing of "show interface" counters never
  Input queue: 0/75/0/0 (size/max/drops/flushes); Total output drops: 0
  Queueing strategy: fifo
  Output queue: 0/40 (size/max)
  5 minute input rate 0 bits/sec, 0 packets/sec
  5 minute output rate 0 bits/sec, 0 packets/sec
     1 packets input, 64 bytes, 0 no buffer
     Received 0 broadcasts (0 multicast)
     0 runts, 0 giants, 0 throttles
     0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
     0 watchdog, 0 multicast, 0 pause input
     0 input packets with dribble condition detected
     1 packets output, 64 bytes, 0 underruns
     0 output errors, 0 collisions, 2 interface resets
     0 babbles, 0 late collision, 0 deferred
     0 lost carrier, 0 no carrier, 0 PAUSE output
     0 output buffer failures, 0 output buffers swapped out
FastEthernet0/6 is administratively down, line protocol is down
(disabled)
  Hardware is Fast Ethernet, address is 0015.fab8.2886 (bia
0015.fab8.2886)
```

```
    MTU 1500 bytes, BW 100000 Kbit, DLY 100 usec,
        reliability 255/255, txload 1/255, rxload 1/255
    Encapsulation ARPA, loopback not set
    Keepalive set (10 sec)
    Auto-duplex, Auto-speed, media type is 100BaseTX
    input flow-control is unsupported output flow-control is unsupported
    ARP type: ARPA, ARP Timeout 04:00:00
    Last input never, output 02:06:26, output hang never
    Last clearing of "show interface" counters never
    Input queue: 0/75/0/0 (size/max/drops/flushes); Total output drops: 0
    Queueing strategy: fifo
    Output queue: 0/40 (size/max)
    5 minute input rate 0 bits/sec, 0 packets/sec
    5 minute output rate 0 bits/sec, 0 packets/sec
        1 packets input, 64 bytes, 0 no buffer
        Received 0 broadcasts (0 multicast)
        0 runts, 0 giants, 0 throttles
        0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
        0 watchdog, 0 multicast, 0 pause input
        0 input packets with dribble condition detected
        1 packets output, 64 bytes, 0 underruns
        0 output errors, 0 collisions, 2 interface resets
        0 babbles, 0 late collision, 0 deferred
        0 lost carrier, 0 no carrier, 0 PAUSE output
        0 output buffer failures, 0 output buffers swapped out
FastEthernet0/7 is administratively down, line protocol is down
(disabled)
    Hardware is Fast Ethernet, address is 0015.fab8.2887 (bia
0015.fab8.2887)
    MTU 1500 bytes, BW 100000 Kbit, DLY 100 usec,
        reliability 255/255, txload 1/255, rxload 1/255
    Encapsulation ARPA, loopback not set
    Keepalive set (10 sec)
    Auto-duplex, Auto-speed, media type is 100BaseTX
    input flow-control is unsupported output flow-control is unsupported
    ARP type: ARPA, ARP Timeout 04:00:00
    Last input never, output 02:06:27, output hang never
    Last clearing of "show interface" counters never
    Input queue: 0/75/0/0 (size/max/drops/flushes); Total output drops: 0
    Queueing strategy: fifo
    Output queue: 0/40 (size/max)
    5 minute input rate 0 bits/sec, 0 packets/sec
    5 minute output rate 0 bits/sec, 0 packets/sec
        1 packets input, 64 bytes, 0 no buffer
        Received 0 broadcasts (0 multicast)
        0 runts, 0 giants, 0 throttles
        0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
        0 watchdog, 0 multicast, 0 pause input
        0 input packets with dribble condition detected
        1 packets output, 64 bytes, 0 underruns
        0 output errors, 0 collisions, 2 interface resets
        0 babbles, 0 late collision, 0 deferred
        0 lost carrier, 0 no carrier, 0 PAUSE output
        0 output buffer failures, 0 output buffers swapped out
```

```
FastEthernet0/8 is administratively down, line protocol is down
(disabled)
  Hardware is Fast Ethernet, address is 0015.fab8.2888 (bia
0015.fab8.2888)
  MTU 1500 bytes, BW 100000 Kbit, DLY 100 usec,
     reliability 255/255, txload 1/255, rxload 1/255
  Encapsulation ARPA, loopback not set
  Keepalive set (10 sec)
  Auto-duplex, Auto-speed, media type is 100BaseTX
  input flow-control is unsupported output flow-control is unsupported
  ARP type: ARPA, ARP Timeout 04:00:00
  Last input never, output 02:06:29, output hang never
  Last clearing of "show interface" counters never
  Input queue: 0/75/0/0 (size/max/drops/flushes); Total output drops: 0
  Queueing strategy: fifo
  Output queue: 0/40 (size/max)
  5 minute input rate 0 bits/sec, 0 packets/sec
  5 minute output rate 0 bits/sec, 0 packets/sec
     1 packets input, 64 bytes, 0 no buffer
     Received 0 broadcasts (0 multicast)
     0 runts, 0 giants, 0 throttles
     0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
     0 watchdog, 0 multicast, 0 pause input
     0 input packets with dribble condition detected
     1 packets output, 64 bytes, 0 underruns
     0 output errors, 0 collisions, 2 interface resets
     0 babbles, 0 late collision, 0 deferred
     0 lost carrier, 0 no carrier, 0 PAUSE output
     0 output buffer failures, 0 output buffers swapped out
FastEthernet0/9 is administratively down, line protocol is down
(disabled)
  Hardware is Fast Ethernet, address is 0015.fab8.2889 (bia
0015.fab8.2889)
  MTU 1500 bytes, BW 100000 Kbit, DLY 100 usec,
     reliability 255/255, txload 1/255, rxload 1/255
  Encapsulation ARPA, loopback not set
  Keepalive set (10 sec)
  Auto-duplex, Auto-speed, media type is 100BaseTX
  input flow-control is unsupported output flow-control is unsupported
  ARP type: ARPA, ARP Timeout 04:00:00
  Last input never, output 02:06:30, output hang never
  Last clearing of "show interface" counters never
  Input queue: 0/75/0/0 (size/max/drops/flushes); Total output drops: 0
  Queueing strategy: fifo
  Output queue: 0/40 (size/max)
  5 minute input rate 0 bits/sec, 0 packets/sec
  5 minute output rate 0 bits/sec, 0 packets/sec
     1 packets input, 64 bytes, 0 no buffer
     Received 0 broadcasts (0 multicast)
     0 runts, 0 giants, 0 throttles
     0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
     0 watchdog, 0 multicast, 0 pause input
     0 input packets with dribble condition detected
     1 packets output, 64 bytes, 0 underruns
```

```
     0 output errors, 0 collisions, 2 interface resets
     0 babbles, 0 late collision, 0 deferred
     0 lost carrier, 0 no carrier, 0 PAUSE output
     0 output buffer failures, 0 output buffers swapped out
FastEthernet0/10 is administratively down, line protocol is down
(disabled)
  Hardware is Fast Ethernet, address is 0015.fab8.288a (bia
0015.fab8.288a)
  MTU 1500 bytes, BW 100000 Kbit, DLY 100 usec,
     reliability 255/255, txload 1/255, rxload 1/255
  Encapsulation ARPA, loopback not set
  Keepalive set (10 sec)
  Auto-duplex, Auto-speed, media type is 100BaseTX
  input flow-control is unsupported output flow-control is unsupported
  ARP type: ARPA, ARP Timeout 04:00:00
  Last input never, output 02:06:32, output hang never
  Last clearing of "show interface" counters never
  Input queue: 0/75/0/0 (size/max/drops/flushes); Total output drops: 0
  Queueing strategy: fifo
  Output queue: 0/40 (size/max)
  5 minute input rate 0 bits/sec, 0 packets/sec
  5 minute output rate 0 bits/sec, 0 packets/sec
     1 packets input, 64 bytes, 0 no buffer
     Received 0 broadcasts (0 multicast)
     0 runts, 0 giants, 0 throttles
     0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
     0 watchdog, 0 multicast, 0 pause input
     0 input packets with dribble condition detected
     1 packets output, 64 bytes, 0 underruns
     0 output errors, 0 collisions, 2 interface resets
     0 babbles, 0 late collision, 0 deferred
     0 lost carrier, 0 no carrier, 0 PAUSE output
     0 output buffer failures, 0 output buffers swapped out
FastEthernet0/11 is administratively down, line protocol is down
(disabled)
  Hardware is Fast Ethernet, address is 0015.fab8.288b (bia
0015.fab8.288b)
  MTU 1500 bytes, BW 100000 Kbit, DLY 100 usec,
     reliability 255/255, txload 1/255, rxload 1/255
  Encapsulation ARPA, loopback not set
  Keepalive set (10 sec)
  Auto-duplex, Auto-speed, media type is 100BaseTX
  input flow-control is unsupported output flow-control is unsupported
  ARP type: ARPA, ARP Timeout 04:00:00
  Last input never, output 02:06:33, output hang never
  Last clearing of "show interface" counters never
  Input queue: 0/75/0/0 (size/max/drops/flushes); Total output drops: 0
  Queueing strategy: fifo
  Output queue: 0/40 (size/max)
  5 minute input rate 0 bits/sec, 0 packets/sec
  5 minute output rate 0 bits/sec, 0 packets/sec
     1 packets input, 64 bytes, 0 no buffer
     Received 0 broadcasts (0 multicast)
     0 runts, 0 giants, 0 throttles
```

```
     0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
     0 watchdog, 0 multicast, 0 pause input
     0 input packets with dribble condition detected
     1 packets output, 64 bytes, 0 underruns
     0 output errors, 0 collisions, 2 interface resets
     0 babbles, 0 late collision, 0 deferred
     0 lost carrier, 0 no carrier, 0 PAUSE output
     0 output buffer failures, 0 output buffers swapped out
FastEthernet0/12 is administratively down, line protocol is down
(disabled)
  Hardware is Fast Ethernet, address is 0015.fab8.288c (bia
0015.fab8.288c)
  MTU 1500 bytes, BW 100000 Kbit, DLY 100 usec,
     reliability 255/255, txload 1/255, rxload 1/255
  Encapsulation ARPA, loopback not set
  Keepalive set (10 sec)
  Auto-duplex, Auto-speed, media type is 100BaseTX
  input flow-control is unsupported output flow-control is unsupported
  ARP type: ARPA, ARP Timeout 04:00:00
  Last input never, output 02:06:35, output hang never
  Last clearing of "show interface" counters never
  Input queue: 0/75/0/0 (size/max/drops/flushes); Total output drops: 0
  Queueing strategy: fifo
  Output queue: 0/40 (size/max)
  5 minute input rate 0 bits/sec, 0 packets/sec
  5 minute output rate 0 bits/sec, 0 packets/sec
     1 packets input, 64 bytes, 0 no buffer
     Received 0 broadcasts (0 multicast)
     0 runts, 0 giants, 0 throttles
     0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
     0 watchdog, 0 multicast, 0 pause input
     0 input packets with dribble condition detected
     1 packets output, 64 bytes, 0 underruns
     0 output errors, 0 collisions, 2 interface resets
     0 babbles, 0 late collision, 0 deferred
     0 lost carrier, 0 no carrier, 0 PAUSE output
     0 output buffer failures, 0 output buffers swapped out
FastEthernet0/13 is administratively down, line protocol is down
(disabled)
  Hardware is Fast Ethernet, address is 0015.fab8.288d (bia
0015.fab8.288d)
  MTU 1500 bytes, BW 100000 Kbit, DLY 100 usec,
     reliability 255/255, txload 1/255, rxload 1/255
  Encapsulation ARPA, loopback not set
  Keepalive set (10 sec)
  Auto-duplex, Auto-speed, media type is 100BaseTX
  input flow-control is unsupported output flow-control is unsupported
  ARP type: ARPA, ARP Timeout 04:00:00
  Last input never, output 02:06:36, output hang never
  Last clearing of "show interface" counters never
  Input queue: 0/75/0/0 (size/max/drops/flushes); Total output drops: 0
  Queueing strategy: fifo
  Output queue: 0/40 (size/max)
  5 minute input rate 0 bits/sec, 0 packets/sec
```

```
    5 minute output rate 0 bits/sec, 0 packets/sec
       1 packets input, 64 bytes, 0 no buffer
       Received 0 broadcasts (0 multicast)
       0 runts, 0 giants, 0 throttles
       0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
       0 watchdog, 0 multicast, 0 pause input
       0 input packets with dribble condition detected
       1 packets output, 64 bytes, 0 underruns
       0 output errors, 0 collisions, 2 interface resets
       0 babbles, 0 late collision, 0 deferred
       0 lost carrier, 0 no carrier, 0 PAUSE output
       0 output buffer failures, 0 output buffers swapped out
FastEthernet0/14 is administratively down, line protocol is down
(disabled)
  Hardware is Fast Ethernet, address is 0015.fab8.288e (bia
0015.fab8.288e)
  MTU 1500 bytes, BW 100000 Kbit, DLY 100 usec,
     reliability 255/255, txload 1/255, rxload 1/255
  Encapsulation ARPA, loopback not set
  Keepalive set (10 sec)
  Auto-duplex, Auto-speed, media type is 100BaseTX
  input flow-control is unsupported output flow-control is unsupported
  ARP type: ARPA, ARP Timeout 04:00:00
  Last input never, output 02:06:38, output hang never
  Last clearing of "show interface" counters never
  Input queue: 0/75/0/0 (size/max/drops/flushes); Total output drops: 0
  Queueing strategy: fifo
  Output queue: 0/40 (size/max)
  5 minute input rate 0 bits/sec, 0 packets/sec
  5 minute output rate 0 bits/sec, 0 packets/sec
       1 packets input, 64 bytes, 0 no buffer
       Received 0 broadcasts (0 multicast)
       0 runts, 0 giants, 0 throttles
       0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
       0 watchdog, 0 multicast, 0 pause input
       0 input packets with dribble condition detected
       1 packets output, 64 bytes, 0 underruns
       0 output errors, 0 collisions, 2 interface resets
       0 babbles, 0 late collision, 0 deferred
       0 lost carrier, 0 no carrier, 0 PAUSE output
       0 output buffer failures, 0 output buffers swapped out
FastEthernet0/15 is down, line protocol is down (notconnect)
  Hardware is Fast Ethernet, address is 0015.fab8.288f (bia
0015.fab8.288f)
  MTU 1500 bytes, BW 100000 Kbit, DLY 100 usec,
     reliability 255/255, txload 1/255, rxload 1/255
  Encapsulation ARPA, loopback not set
  Keepalive set (10 sec)
  Auto-duplex, Auto-speed, media type is 100BaseTX
  input flow-control is unsupported output flow-control is unsupported
  ARP type: ARPA, ARP Timeout 04:00:00
  Last input never, output 02:06:40, output hang never
  Last clearing of "show interface" counters never
  Input queue: 0/75/0/0 (size/max/drops/flushes); Total output drops: 0
```

```
   Queueing strategy: fifo
   Output queue: 0/40 (size/max)
   5 minute input rate 0 bits/sec, 0 packets/sec
   5 minute output rate 0 bits/sec, 0 packets/sec
      1 packets input, 64 bytes, 0 no buffer
      Received 0 broadcasts (0 multicast)
      0 runts, 0 giants, 0 throttles
      0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
      0 watchdog, 0 multicast, 0 pause input
      0 input packets with dribble condition detected
      1 packets output, 64 bytes, 0 underruns
      0 output errors, 0 collisions, 2 interface resets
      0 babbles, 0 late collision, 0 deferred
      0 lost carrier, 0 no carrier, 0 PAUSE output
      0 output buffer failures, 0 output buffers swapped out
FastEthernet0/16 is up, line protocol is up (connected)
  Hardware is Fast Ethernet, address is 0015.fab8.2890 (bia
0015.fab8.2890)
  MTU 1500 bytes, BW 100000 Kbit, DLY 100 usec,
     reliability 255/255, txload 1/255, rxload 1/255
  Encapsulation ARPA, loopback not set
  Keepalive set (10 sec)
  Full-duplex, 100Mb/s, media type is 100BaseTX
  input flow-control is unsupported output flow-control is unsupported
  ARP type: ARPA, ARP Timeout 04:00:00
  Last input 00:00:00, output 00:00:06, output hang never
  Last clearing of "show interface" counters never
  Input queue: 0/75/0/0 (size/max/drops/flushes); Total output drops: 0
  Queueing strategy: fifo
  Output queue: 0/40 (size/max)
  5 minute input rate 0 bits/sec, 0 packets/sec
  5 minute output rate 0 bits/sec, 0 packets/sec
     3321 packets input, 295718 bytes, 0 no buffer
     Received 2551 broadcasts (0 multicast)
     0 runts, 0 giants, 0 throttles
     0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
     0 watchdog, 2548 multicast, 0 pause input
     0 input packets with dribble condition detected
     7264 packets output, 586044 bytes, 0 underruns
     0 output errors, 0 collisions, 2 interface resets
     0 babbles, 0 late collision, 0 deferred
     0 lost carrier, 0 no carrier, 0 PAUSE output
     0 output buffer failures, 0 output buffers swapped out
FastEthernet0/17 is up, line protocol is up (connected)
  Hardware is Fast Ethernet, address is 0015.fab8.2891 (bia
0015.fab8.2891)
  MTU 1500 bytes, BW 100000 Kbit, DLY 100 usec,
     reliability 255/255, txload 1/255, rxload 1/255
  Encapsulation ARPA, loopback not set
  Keepalive set (10 sec)
  Full-duplex, 100Mb/s, media type is 100BaseTX
  input flow-control is unsupported output flow-control is unsupported
  ARP type: ARPA, ARP Timeout 04:00:00
  Last input 00:00:07, output 00:00:07, output hang never
```

```
   Last clearing of "show interface" counters never
   Input queue: 0/75/0/0 (size/max/drops/flushes); Total output drops: 0
   Queueing strategy: fifo
   Output queue: 0/40 (size/max)
   5 minute input rate 0 bits/sec, 0 packets/sec
   5 minute output rate 0 bits/sec, 0 packets/sec
      1409 packets input, 138546 bytes, 0 no buffer
      Received 657 broadcasts (0 multicast)
      0 runts, 0 giants, 0 throttles
      0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
      0 watchdog, 656 multicast, 0 pause input
      0 input packets with dribble condition detected
      1485 packets output, 150431 bytes, 0 underruns
      0 output errors, 0 collisions, 2 interface resets
      0 babbles, 0 late collision, 0 deferred
      0 lost carrier, 0 no carrier, 0 PAUSE output
      0 output buffer failures, 0 output buffers swapped out
FastEthernet0/18 is up, line protocol is up (connected)
  Hardware is Fast Ethernet, address is 0015.fab8.2892 (bia
0015.fab8.2892)
  MTU 1500 bytes, BW 100000 Kbit, DLY 100 usec,
     reliability 255/255, txload 1/255, rxload 1/255
  Encapsulation ARPA, loopback not set
  Keepalive set (10 sec)
  Full-duplex, 100Mb/s, media type is 100BaseTX
  input flow-control is unsupported output flow-control is unsupported
  ARP type: ARPA, ARP Timeout 04:00:00
  Last input 00:00:09, output 00:00:09, output hang never
  Last clearing of "show interface" counters never
  Input queue: 0/75/0/0 (size/max/drops/flushes); Total output drops: 0
  Queueing strategy: fifo
  Output queue: 0/40 (size/max)
  5 minute input rate 0 bits/sec, 0 packets/sec
  5 minute output rate 0 bits/sec, 0 packets/sec
     5207 packets input, 412565 bytes, 0 no buffer
     Received 4455 broadcasts (0 multicast)
     0 runts, 0 giants, 0 throttles
     0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
     0 watchdog, 4455 multicast, 0 pause input
     0 input packets with dribble condition detected
     1487 packets output, 150575 bytes, 0 underruns
     0 output errors, 0 collisions, 2 interface resets
     0 babbles, 0 late collision, 0 deferred
     0 lost carrier, 0 no carrier, 0 PAUSE output
     0 output buffer failures, 0 output buffers swapped out
FastEthernet0/19 is up, line protocol is up (connected)
  Hardware is Fast Ethernet, address is 0015.fab8.2893 (bia
0015.fab8.2893)
  MTU 1500 bytes, BW 100000 Kbit, DLY 100 usec,
     reliability 255/255, txload 1/255, rxload 1/255
  Encapsulation ARPA, loopback not set
  Keepalive set (10 sec)
  Full-duplex, 100Mb/s, media type is 100BaseTX
  input flow-control is unsupported output flow-control is unsupported
```

```
   ARP type: ARPA, ARP Timeout 04:00:00
   Last input 00:00:21, output 00:00:00, output hang never
   Last clearing of "show interface" counters never
   Input queue: 0/75/0/0 (size/max/drops/flushes); Total output drops: 0
   Queueing strategy: fifo
   Output queue: 0/40 (size/max)
   5 minute input rate 0 bits/sec, 0 packets/sec
   5 minute output rate 0 bits/sec, 0 packets/sec
      7153 packets input, 573169 bytes, 0 no buffer
      Received 6386 broadcasts (0 multicast)
      0 runts, 0 giants, 0 throttles
      0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
      0 watchdog, 6385 multicast, 0 pause input
      0 input packets with dribble condition detected
      1537 packets output, 154372 bytes, 0 underruns
      0 output errors, 0 collisions, 2 interface resets
      0 babbles, 0 late collision, 0 deferred
      0 lost carrier, 0 no carrier, 0 PAUSE output
      0 output buffer failures, 0 output buffers swapped out
FastEthernet0/20 is up, line protocol is up (connected)
  Hardware is Fast Ethernet, address is 0015.fab8.2894 (bia
0015.fab8.2894)
  MTU 1500 bytes, BW 100000 Kbit, DLY 100 usec,
     reliability 255/255, txload 1/255, rxload 1/255
  Encapsulation ARPA, loopback not set
  Keepalive set (10 sec)
  Full-duplex, 100Mb/s, media type is 100BaseTX
  input flow-control is unsupported output flow-control is unsupported
  ARP type: ARPA, ARP Timeout 04:00:00
  Last input 00:00:23, output 00:00:02, output hang never
  Last clearing of "show interface" counters never
  Input queue: 0/75/0/0 (size/max/drops/flushes); Total output drops: 0
  Queueing strategy: fifo
  Output queue: 0/40 (size/max)
  5 minute input rate 0 bits/sec, 0 packets/sec
  5 minute output rate 0 bits/sec, 0 packets/sec
     1405 packets input, 140716 bytes, 0 no buffer
     Received 652 broadcasts (0 multicast)
     0 runts, 0 giants, 0 throttles
     0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
     0 watchdog, 652 multicast, 0 pause input
     0 input packets with dribble condition detected
     7198 packets output, 582429 bytes, 0 underruns
     0 output errors, 0 collisions, 2 interface resets
     0 babbles, 0 late collision, 0 deferred
     0 lost carrier, 0 no carrier, 0 PAUSE output
     0 output buffer failures, 0 output buffers swapped out
FastEthernet0/21 is up, line protocol is up (connected)
  Hardware is Fast Ethernet, address is 0015.fab8.2895 (bia
0015.fab8.2895)
  MTU 1500 bytes, BW 100000 Kbit, DLY 100 usec,
     reliability 255/255, txload 1/255, rxload 1/255
  Encapsulation ARPA, loopback not set
  Keepalive set (10 sec)
```

```
   Full-duplex, 100Mb/s, media type is 100BaseTX
   input flow-control is unsupported output flow-control is unsupported
   ARP type: ARPA, ARP Timeout 04:00:00
   Last input 00:00:00, output 00:00:00, output hang never
   Last clearing of "show interface" counters never
   Input queue: 0/75/0/0 (size/max/drops/flushes); Total output drops: 0
   Queueing strategy: fifo
   Output queue: 0/40 (size/max)
   5 minute input rate 0 bits/sec, 0 packets/sec
   5 minute output rate 0 bits/sec, 0 packets/sec
      1404 packets input, 140448 bytes, 0 no buffer
      Received 656 broadcasts (0 multicast)
      0 runts, 0 giants, 0 throttles
      0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
      0 watchdog, 656 multicast, 0 pause input
      0 input packets with dribble condition detected
      1538 packets output, 154462 bytes, 0 underruns
      0 output errors, 0 collisions, 2 interface resets
      0 babbles, 0 late collision, 0 deferred
      0 lost carrier, 0 no carrier, 0 PAUSE output
      0 output buffer failures, 0 output buffers swapped out
FastEthernet0/22 is down, line protocol is down (notconnect)
  Hardware is Fast Ethernet, address is 0015.fab8.2896 (bia
0015.fab8.2896)
  MTU 1500 bytes, BW 100000 Kbit, DLY 100 usec,
      reliability 255/255, txload 1/255, rxload 1/255
   Encapsulation ARPA, loopback not set
   Keepalive set (10 sec)
   Auto-duplex, Auto-speed, media type is 100BaseTX
   input flow-control is unsupported output flow-control is unsupported
   ARP type: ARPA, ARP Timeout 04:00:00
   Last input never, output 02:06:50, output hang never
   Last clearing of "show interface" counters never
   Input queue: 0/75/0/0 (size/max/drops/flushes); Total output drops: 0
   Queueing strategy: fifo
   Output queue: 0/40 (size/max)
   5 minute input rate 0 bits/sec, 0 packets/sec
   5 minute output rate 0 bits/sec, 0 packets/sec
      1 packets input, 64 bytes, 0 no buffer
      Received 0 broadcasts (0 multicast)
      0 runts, 0 giants, 0 throttles
      0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
      0 watchdog, 0 multicast, 0 pause input
      0 input packets with dribble condition detected
      1 packets output, 64 bytes, 0 underruns
      0 output errors, 0 collisions, 2 interface resets
      0 babbles, 0 late collision, 0 deferred
      0 lost carrier, 0 no carrier, 0 PAUSE output
      0 output buffer failures, 0 output buffers swapped out
FastEthernet0/23 is down, line protocol is down (notconnect)
  Hardware is Fast Ethernet, address is 0015.fab8.2897 (bia
0015.fab8.2897)
  MTU 1500 bytes, BW 100000 Kbit, DLY 100 usec,
      reliability 255/255, txload 1/255, rxload 1/255
```

```
   Encapsulation ARPA, loopback not set
   Keepalive set (10 sec)
   Auto-duplex, Auto-speed, media type is 100BaseTX
   input flow-control is unsupported output flow-control is unsupported
   ARP type: ARPA, ARP Timeout 04:00:00
   Last input never, output 02:06:52, output hang never
   Last clearing of "show interface" counters never
   Input queue: 0/75/0/0 (size/max/drops/flushes); Total output drops: 0
   Queueing strategy: fifo
   Output queue: 0/40 (size/max)
   5 minute input rate 0 bits/sec, 0 packets/sec
   5 minute output rate 0 bits/sec, 0 packets/sec
      1 packets input, 64 bytes, 0 no buffer
      Received 0 broadcasts (0 multicast)
      0 runts, 0 giants, 0 throttles
      0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
      0 watchdog, 0 multicast, 0 pause input
      0 input packets with dribble condition detected
      1 packets output, 64 bytes, 0 underruns
      0 output errors, 0 collisions, 2 interface resets
      0 babbles, 0 late collision, 0 deferred
      0 lost carrier, 0 no carrier, 0 PAUSE output
      0 output buffer failures, 0 output buffers swapped out
FastEthernet0/24 is down, line protocol is down (notconnect)
   Hardware is Fast Ethernet, address is 0015.fab8.2898 (bia
0015.fab8.2898)
   MTU 1500 bytes, BW 100000 Kbit, DLY 100 usec,
      reliability 255/255, txload 1/255, rxload 1/255
   Encapsulation ARPA, loopback not set
   Keepalive set (10 sec)
   Auto-duplex, Auto-speed, media type is 100BaseTX
   input flow-control is unsupported output flow-control is unsupported
   ARP type: ARPA, ARP Timeout 04:00:00
   Last input never, output 02:06:54, output hang never
   Last clearing of "show interface" counters never
   Input queue: 0/75/0/0 (size/max/drops/flushes); Total output drops: 0
   Queueing strategy: fifo
   Output queue: 0/40 (size/max)
   5 minute input rate 0 bits/sec, 0 packets/sec
   5 minute output rate 0 bits/sec, 0 packets/sec
      1 packets input, 64 bytes, 0 no buffer
      Received 0 broadcasts (0 multicast)
      0 runts, 0 giants, 0 throttles
      0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
      0 watchdog, 0 multicast, 0 pause input
      0 input packets with dribble condition detected
      1 packets output, 64 bytes, 0 underruns
      0 output errors, 0 collisions, 2 interface resets
      0 babbles, 0 late collision, 0 deferred
      0 lost carrier, 0 no carrier, 0 PAUSE output
      0 output buffer failures, 0 output buffers swapped out
Port-channel1 is up, line protocol is up (connected)
   Hardware is EtherChannel, address is 0015.fab8.2894 (bia
0015.fab8.2894)
```

```
    MTU 1500 bytes, BW 300000 Kbit, DLY 1000 usec,
        reliability 255/255, txload 1/255, rxload 1/255
    Encapsulation ARPA, loopback not set
    Full-duplex, 100Mb/s, media type is unknown media type
    input flow-control is off, output flow-control is off
    Members in this channel: Fa0/19 Fa0/20 Fa0/21
    ARP type: ARPA, ARP Timeout 04:00:00
    Last input 00:00:01, output 00:00:01, output hang never
    Last clearing of "show interface" counters never
    Input queue: 0/75/0/0 (size/max/drops/flushes); Total output drops: 0
    Queueing strategy: fifo
    Output queue: 0/40 (size/max)
    5 minute input rate 1000 bits/sec, 1 packets/sec
    5 minute output rate 0 bits/sec, 0 packets/sec
        9956 packets input, 853991 bytes, 0 no buffer
        Received 7688 broadcasts (0 multicast)
        0 runts, 0 giants, 0 throttles
        0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
        0 watchdog, 7687 multicast, 0 pause input
        0 input packets with dribble condition detected
        9855 packets output, 851478 bytes, 0 underruns
        0 output errors, 0 collisions, 1 interface resets
        0 babbles, 0 late collision, 0 deferred
        0 lost carrier, 0 no carrier, 0 PAUSE output
        0 output buffer failures, 0 output buffers swapped out
Port-channel2 is up, line protocol is up (connected)
  Hardware is EtherChannel, address is 0015.fab8.2890 (bia
0015.fab8.2890)
  MTU 1500 bytes, BW 300000 Kbit, DLY 1000 usec,
      reliability 255/255, txload 1/255, rxload 1/255
  Encapsulation ARPA, loopback not set
  Full-duplex, 100Mb/s, media type is unknown media type
  input flow-control is off, output flow-control is off
  Members in this channel: Fa0/16 Fa0/17 Fa0/18
  ARP type: ARPA, ARP Timeout 04:00:00
  Last input 00:00:00, output 00:00:01, output hang never
  Last clearing of "show interface" counters never
  Input queue: 0/75/0/0 (size/max/drops/flushes); Total output drops: 0
  Queueing strategy: fifo
  Output queue: 0/40 (size/max)
  5 minute input rate 0 bits/sec, 0 packets/sec
  5 minute output rate 0 bits/sec, 0 packets/sec
      9937 packets input, 846897 bytes, 0 no buffer
      Received 7662 broadcasts (0 multicast)
      0 runts, 0 giants, 0 throttles
      0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
      0 watchdog, 7658 multicast, 0 pause input
      0 input packets with dribble condition detected
      10003 packets output, 862207 bytes, 0 underruns
      0 output errors, 0 collisions, 1 interface resets
      0 babbles, 0 late collision, 0 deferred
      0 lost carrier, 0 no carrier, 0 PAUSE output
      0 output buffer failures, 0 output buffers swapped out
ASW2#
```

```
ASW2#show interfaces counters errors

Port         Align-Err    FCS-Err    Xmit-Err    Rcv-Err UnderSize
Fa0/1               0          0           0          0          0
Fa0/2               0          0           0          0          0
Fa0/3               0          0           0          0          0
Fa0/4               0          0           0          0          0
Fa0/5               0          0           0          0          0
Fa0/6               0          0           0          0          0
Fa0/7               0          0           0          0          0
Fa0/8               0          0           0          0          0
Fa0/9               0          0           0          0          0
Fa0/10              0          0           0          0          0
```

Port					
Fa0/11	0	0	0	0	0
Fa0/12	0	0	0	0	0
Fa0/13	0	0	0	0	0
Fa0/14	0	0	0	0	0
Fa0/15	0	0	0	0	0
Fa0/16	0	0	0	0	0
Fa0/17	0	0	0	0	0
Fa0/18	0	0	0	0	0
Fa0/19	0	0	0	0	0
Fa0/20	0	0	0	0	0
Fa0/21	0	0	0	0	0
Fa0/22	0	0	0	0	0
Fa0/23	0	0	0	0	0
Fa0/24	0	0	0	0	0
Po1	0	0	0	0	0
Po2	0	0	0	0	0

Port	Single-Col	Multi-Col	Late-Col	Excess-Col	Carri-Sen	Runts	Giants
Fa0/1	0	0	0	0	0	0	0
Fa0/2	0	0	0	0	0	0	0
Fa0/3	0	0	0	0	0	0	0
Fa0/4	0	0	0	0	0	0	0
Fa0/5	0	0	0	0	0	0	0
Fa0/6	0	0	0	0	0	0	0
Fa0/7	0	0	0	0	0	0	0
Fa0/8	0	0	0	0	0	0	0
Fa0/9	0	0	0	0	0	0	0
Fa0/10	0	0	0	0	0	0	0
Fa0/11	0	0	0	0	0	0	0
Fa0/12	0	0	0	0	0	0	0
Fa0/13	0	0	0	0	0	0	0
Fa0/14	0	0	0	0	0	0	0
Fa0/15	0	0	0	0	0	0	0
Fa0/16	0	0	0	0	1	0	0
Fa0/17	0	0	0	0	1	0	0

Fa0/18	0	0	0	0	1	0
	0					
Fa0/19	0	0	0	0	2	0
	0					
Fa0/20	0	0	0	0	2	0
	0					
Fa0/21	0	0	0	0	2	0
	0					
Fa0/22	0	0	0	0	0	0
	0					
Fa0/23	0	0	0	0	1	0
	0					
Fa0/24	0	0	0	0	1	0
	0					
Po1	0	0	0	0	0	0
	0					
Po2	0	0	0	0	0	0
	0					

ASW2#

```
ASW2#show cdp neighbors
Capability Codes: R - Router, T - Trans Bridge, B - Source Route Bridge
                  S - Switch, H - Host, I - IGMP, r - Repeater, P - Phone

Device ID       Local Intrfce    Holdtme    Capability  Platform  Port
ID
DSW1            Fas 0/18         141        R S I       Cisco WS-CFas
0/18
DSW1            Fas 0/17         141        R S I       Cisco WS-CFas
0/17
DSW1            Fas 0/16         141        R S I       Cisco WS-CFas
0/16
DSW2            Fas 0/19         130        R S I       Cisco WS-CFas
0/16
DSW2            Fas 0/21         129        R S I       Cisco WS-CFas
0/18
DSW2            Fas 0/20         129        R S I       Cisco WS-CFas
0/17
ASW2#
```

```
ASW2#show cdp neighbors detail
-------------------------
Device ID: DSW1
Entry address(es):
  IP address: 10.2.1.1
Platform: Cisco WS-C3550-24,  Capabilities: Router Switch IGMP
Interface: FastEthernet0/18,  Port ID (outgoing port): FastEthernet0/18
Holdtime : 134 sec

Version :
Cisco IOS Software, C3550 Software (C3550-IPSERVICESK9-M), Version
12.2(44)SE6, RELEASE SOFTWARE (fc1)
Copyright (c) 1986-2009 by Cisco Systems, Inc.
Compiled Mon 09-Mar-09 20:28 by gereddy

advertisement version: 2
Protocol Hello:  OUI=0x00000C, Protocol ID=0x0112; payload len=27,
value=00000000FFFFFFFF0102250E000000000000000DBDE36E00FF0000
VTP Management Domain: 'netlearning'
Native VLAN: 1
Duplex: full
Management address(es):
  IP address: 10.2.1.1

-------------------------
Device ID: DSW1
Entry address(es):
  IP address: 10.2.1.1
Platform: Cisco WS-C3550-24,  Capabilities: Router Switch IGMP
Interface: FastEthernet0/17,  Port ID (outgoing port): FastEthernet0/17
Holdtime : 133 sec

Version :
Cisco IOS Software, C3550 Software (C3550-IPSERVICESK9-M), Version
12.2(44)SE6, RELEASE SOFTWARE (fc1)
Copyright (c) 1986-2009 by Cisco Systems, Inc.
Compiled Mon 09-Mar-09 20:28 by gereddy

advertisement version: 2
Protocol Hello:  OUI=0x00000C, Protocol ID=0x0112; payload len=27,
value=00000000FFFFFFFF0102250E000000000000000DBDE36E00FF0000
VTP Management Domain: 'netlearning'
```

```
Native VLAN: 1
Duplex: full
Management address(es):
  IP address: 10.2.1.1

-------------------------
Device ID: DSW1
Entry address(es):
  IP address: 10.2.1.1
Platform: Cisco WS-C3550-24,  Capabilities: Router Switch IGMP
Interface: FastEthernet0/16,  Port ID (outgoing port): FastEthernet0/16
Holdtime : 132 sec

Version :
Cisco IOS Software, C3550 Software (C3550-IPSERVICESK9-M), Version
12.2(44)SE6, RELEASE SOFTWARE (fc1)
Copyright (c) 1986-2009 by Cisco Systems, Inc.
Compiled Mon 09-Mar-09 20:28 by gereddy

advertisement version: 2
Protocol Hello:  OUI=0x00000C, Protocol ID=0x0112; payload len=27,
value=00000000FFFFFFFF0102250E000000000000000DBDE36E00FF0000
VTP Management Domain: 'netlearning'
Native VLAN: 1
Duplex: full
Management address(es):
  IP address: 10.2.1.1

-------------------------
Device ID: DSW2
Entry address(es):
  IP address: 10.2.1.2
Platform: Cisco WS-C3550-24-PWR,  Capabilities: Router Switch IGMP
Interface: FastEthernet0/19,  Port ID (outgoing port): FastEthernet0/16
Holdtime : 121 sec

Version :
Cisco IOS Software, C3550 Software (C3550-IPSERVICESK9-M), Version
12.2(44)SE6, RELEASE SOFTWARE (fc1)
Copyright (c) 1986-2009 by Cisco Systems, Inc.
Compiled Mon 09-Mar-09 20:28 by gereddy

advertisement version: 2
Protocol Hello:  OUI=0x00000C, Protocol ID=0x0112; payload len=27,
value=00000000FFFFFFFF0102251800000000000000BFD20BA00FF0000
VTP Management Domain: 'netlearning'
Native VLAN: 1
Duplex: full
Management address(es):
  IP address: 10.2.1.2

-------------------------
Device ID: DSW2
Entry address(es):
```

```
   IP address: 10.2.1.2
Platform: Cisco WS-C3550-24-PWR,  Capabilities: Router Switch IGMP
Interface: FastEthernet0/21,  Port ID (outgoing port): FastEthernet0/18
Holdtime : 119 sec

Version :
Cisco IOS Software, C3550 Software (C3550-IPSERVICESK9-M), Version
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Compiled Mon 09-Mar-09 20:28 by gereddy

advertisement version: 2
Protocol Hello:  OUI=0x00000C, Protocol ID=0x0112; payload len=27,
value=00000000FFFFFFFF010225180000000000000000BFD20BA00FF0000
VTP Management Domain: 'netlearning'
Native VLAN: 1
Duplex: full
Management address(es):
   IP address: 10.2.1.2

-------------------------
Device ID: DSW2
Entry address(es):
   IP address: 10.2.1.2
Platform: Cisco WS-C3550-24-PWR,  Capabilities: Router Switch IGMP
Interface: FastEthernet0/20,  Port ID (outgoing port): FastEthernet0/17
Holdtime : 119 sec

Version :
Cisco IOS Software, C3550 Software (C3550-IPSERVICESK9-M), Version
12.2(44)SE6, RELEASE SOFTWARE (fc1)
Copyright (c) 1986-2009 by Cisco Systems, Inc.
Compiled Mon 09-Mar-09 20:28 by gereddy

advertisement version: 2
Protocol Hello:  OUI=0x00000C, Protocol ID=0x0112; payload len=27,
value=00000000FFFFFFFF010225180000000000000000BFD20BA00FF0000
VTP Management Domain: 'netlearning'
Native VLAN: 1
Duplex: full
Management address(es):
   IP address: 10.2.1.2

ASW2#
```

```
ASW2#show arp
Protocol  Address          Age (min)  Hardware Addr   Type   Interface
Internet  192.168.1.132          -    0015.fab8.2880  ARPA   Vlan200
ASW2#
```

```
ASW2#show ip arp
Protocol  Address          Age (min)  Hardware Addr   Type   Interface
Internet  192.168.1.132           -   0015.fab8.2880  ARPA   Vlan200
ASW2#
```

```
ASW2#show ip interface
Vlan1 is administratively down, line protocol is down
  Internet protocol processing disabled
Vlan200 is up, line protocol is up
  Internet address is 192.168.1.132/27
  Broadcast address is 255.255.255.255
  Address determined by non-volatile memory
  MTU is 1500 bytes
  Helper address is not set
  Directed broadcast forwarding is disabled
  Outgoing access list is not set
  Inbound  access list is not set
  Proxy ARP is enabled
  Local Proxy ARP is disabled
  Security level is default
  Split horizon is enabled
  ICMP redirects are always sent
  ICMP unreachables are always sent
  ICMP mask replies are never sent
  IP fast switching is disabled
  IP fast switching on the same interface is disabled
  IP Null turbo vector
  IP multicast fast switching is disabled
  IP multicast distributed fast switching is disabled
  IP route-cache flags are None
  Router Discovery is disabled
  IP output packet accounting is disabled
  IP access violation accounting is disabled
  TCP/IP header compression is disabled
  RTP/IP header compression is disabled
  Probe proxy name replies are disabled
  Policy routing is disabled
  Network address translation is disabled
  WCCP Redirect outbound is disabled
  WCCP Redirect inbound is disabled
  WCCP Redirect exclude is disabled
  BGP Policy Mapping is disabled
ASW2#
```

```
ASW2#show tcp statistics
Rcvd: 0 Total, 0 no port
      0 checksum error, 0 bad offset, 0 too short
      0 packets (0 bytes) in sequence
      0 dup packets (0 bytes)
      0 partially dup packets (0 bytes)
      0 out-of-order packets (0 bytes)
      0 packets (0 bytes) with data after window
      0 packets after close
      0 window probe packets, 0 window update packets
      0 dup ack packets, 0 ack packets with unsend data
      0 ack packets (0 bytes)
Sent: 0 Total, 0 urgent packets
      0 control packets (including 0 retransmitted)
      0 data packets (0 bytes)
      0 data packets (0 bytes) retransmitted
```

```
       0 ack only packets (0 delayed)
       0 window probe packets, 0 window update packets
0 Connections initiated, 0 connections accepted, 0 connections
established
0 Connections closed (including 0 dropped, 0 embryonic dropped)
0 Total rxmt timeout, 0 connections dropped in rxmt timeout
0 Keepalive timeout, 0 keepalive probe, 0 Connections dropped in
keepalive
ASW2#
```

```
ASW2#show access-lists

ASW2#
```

```
ASW2#show vlan

VLAN Name                             Status    Ports
---- -------------------------------- --------- -------------------------
------
1    default                          active    Fa0/22, Fa0/23, Fa0/24
10   VLAN0010                         active
20   VLAN0020                         active    Fa0/1, Fa0/2, Fa0/3,
Fa0/4
                                                Fa0/5, Fa0/6, Fa0/7,
Fa0/8
                                                Fa0/9, Fa0/10, Fa0/11,
Fa0/12
                                                Fa0/13, Fa0/14, Fa0/15
```

```
200  VLAN0200                         active
1002 fddi-default                     act/unsup
1003 trcrf-default                    act/unsup
1004 fddinet-default                  act/unsup
1005 trbrf-default                    act/unsup

VLAN Type  SAID       MTU   Parent RingNo BridgeNo Stp  BrdgMode Trans1
Trans2
---- ----- ---------- ----- ------ ------ -------- ---- -------- ------ -
-----
1    enet  100001     1500  -      -      -        -    -        0      0
10   enet  100010     1500  -      -      -        -    -        0      0
20   enet  100020     1500  -      -      -        -    -        0      0
200  enet  100200     1500  -      -      -        -    -        0      0
1002 fddi  101002     1500  -      -      -        -    -        0      0
1003 trcrf 101003     4472  1005   3276   -        -    srb      0      0
1004 fdnet 101004     1500  -      -      -        ieee -        0      0
1005 trbrf 101005     4472  -      -      15       ibm  -        0      0


VLAN AREHops STEHops Backup CRF
---- ------- ------- ----------
1003 7       7       off

Remote SPAN VLANs
----------------------------------------------------------------------
-----


Primary Secondary Type             Ports
------- --------- ---------------- ------------------------------------
-----

ASW2#
```

```
ASW2#show spanning-tree

VLAN0020
  Spanning tree enabled protocol ieee
  Root ID    Priority    4116
             Address     000b.fd20.ba00
             Cost        9
             Port        65 (Port-channel1)
             Hello Time   2 sec  Max Age 20 sec  Forward Delay 15 sec

  Bridge ID  Priority    32788  (priority 32768 sys-id-ext 20)
             Address     0015.fab8.2880
             Hello Time   2 sec  Max Age 20 sec  Forward Delay 15 sec
             Aging Time 300

Interface        Role Sts Cost      Prio.Nbr Type
---------------- ---- --- --------- -------- ----------------------------
----
Po1              Root FWD 9         128.65   P2p
Po2              Desg FWD 9         128.66   P2p


VLAN0200
  Spanning tree enabled protocol ieee
  Root ID    Priority    4296
             Address     000d.bde3.6e00
             Cost        9
             Port        66 (Port-channel2)
             Hello Time   2 sec  Max Age 20 sec  Forward Delay 15 sec

  Bridge ID  Priority    32968  (priority 32768 sys-id-ext 200)
             Address     0015.fab8.2880
             Hello Time   2 sec  Max Age 20 sec  Forward Delay 15 sec
```

```
            Aging Time 300

Interface         Role Sts Cost      Prio.Nbr Type
---------------- ---- --- --------- -------- ----------------------------
----
Po1              Desg FWD 9         128.65   P2p
Po2              Root FWD 9         128.66   P2p

ASW2#
```

```
ASW2#show interfaces status

Port        Name                    Status      Vlan      Duplex  Speed Type
```

```
Fa0/1                              disabled      20              auto    auto
10/100BaseTX
Fa0/2                              disabled      20              auto    auto
10/100BaseTX
Fa0/3                              disabled      20              auto    auto
10/100BaseTX
Fa0/4                              disabled      20              auto    auto
10/100BaseTX
Fa0/5                              disabled      20              auto    auto
10/100BaseTX
Fa0/6                              disabled      20              auto    auto
10/100BaseTX
Fa0/7                              disabled      20              auto    auto
10/100BaseTX
Fa0/8                              disabled      20              auto    auto
10/100BaseTX
Fa0/9                              disabled      20              auto    auto
10/100BaseTX
Fa0/10                             disabled      20              auto    auto
10/100BaseTX
Fa0/11                             disabled      20              auto    auto
10/100BaseTX
Fa0/12                             disabled      20              auto    auto
10/100BaseTX
Fa0/13                             disabled      20              auto    auto
10/100BaseTX
Fa0/14                             disabled      20              auto    auto
10/100BaseTX
Fa0/15                             notconnect    20              auto    auto
10/100BaseTX
Fa0/16                             connected     trunk         a-full  a-100
10/100BaseTX
Fa0/17                             connected     trunk         a-full  a-100
10/100BaseTX
Fa0/18                             connected     trunk         a-full  a-100
10/100BaseTX
Fa0/19                             connected     trunk         a-full  a-100
10/100BaseTX
Fa0/20                             connected     trunk         a-full  a-100
10/100BaseTX
Fa0/21                             connected     trunk         a-full  a-100
10/100BaseTX
Fa0/22                             notconnect    1               auto    auto
10/100BaseTX
Fa0/23                             notconnect    1               auto    auto
10/100BaseTX
Fa0/24                             notconnect    1               auto    auto
10/100BaseTX
Po1                                connected     trunk         a-full  a-100
Po2                                connected     trunk         a-full  a-100
ASW2#
```

```
ASW2#show interfaces switchport
Name: Fa0/1
Switchport: Enabled
Administrative Mode: static access
Operational Mode: down
Administrative Trunking Encapsulation: dot1q
Negotiation of Trunking: Off
Access Mode VLAN: 20 (VLAN0020)
Trunking Native Mode VLAN: 1 (default)
Voice VLAN: none
Administrative private-vlan host-association: none
Administrative private-vlan mapping: none
Administrative private-vlan trunk native VLAN: none
Administrative private-vlan trunk encapsulation: dot1q
Administrative private-vlan trunk normal VLANs: none
Administrative private-vlan trunk private VLANs: none
```

```
Operational private-vlan: none
Trunking VLANs Enabled: ALL
Pruning VLANs Enabled: 2-1001
Capture Mode Disabled
Capture VLANs Allowed: ALL
Protected: false
Appliance trust: none

Name: Fa0/2
Switchport: Enabled
Administrative Mode: static access
Operational Mode: down
Administrative Trunking Encapsulation: dot1q
Negotiation of Trunking: Off
Access Mode VLAN: 20 (VLAN0020)
Trunking Native Mode VLAN: 1 (default)
Voice VLAN: none
Administrative private-vlan host-association: none
Administrative private-vlan mapping: none
Administrative private-vlan trunk native VLAN: none
Administrative private-vlan trunk encapsulation: dot1q
Administrative private-vlan trunk normal VLANs: none
Administrative private-vlan trunk private VLANs: none
Operational private-vlan: none
Trunking VLANs Enabled: ALL
Pruning VLANs Enabled: 2-1001
Capture Mode Disabled
Capture VLANs Allowed: ALL
Protected: false
Appliance trust: none

Name: Fa0/3
Switchport: Enabled
Administrative Mode: static access
Operational Mode: down
Administrative Trunking Encapsulation: dot1q
Negotiation of Trunking: Off
Access Mode VLAN: 20 (VLAN0020)
Trunking Native Mode VLAN: 1 (default)
Voice VLAN: none
Administrative private-vlan host-association: none
Administrative private-vlan mapping: none
Administrative private-vlan trunk native VLAN: none
Administrative private-vlan trunk encapsulation: dot1q
Administrative private-vlan trunk normal VLANs: none
Administrative private-vlan trunk private VLANs: none
Operational private-vlan: none
Trunking VLANs Enabled: ALL
Pruning VLANs Enabled: 2-1001
Capture Mode Disabled
Capture VLANs Allowed: ALL
Protected: false
Appliance trust: none
```

```
Name: Fa0/4
Switchport: Enabled
Administrative Mode: static access
Operational Mode: down
Administrative Trunking Encapsulation: dot1q
Negotiation of Trunking: Off
Access Mode VLAN: 20 (VLAN0020)
Trunking Native Mode VLAN: 1 (default)
Voice VLAN: none
Administrative private-vlan host-association: none
Administrative private-vlan mapping: none
Administrative private-vlan trunk native VLAN: none
Administrative private-vlan trunk encapsulation: dot1q
Administrative private-vlan trunk normal VLANs: none
Administrative private-vlan trunk private VLANs: none
Operational private-vlan: none
Trunking VLANs Enabled: ALL
Pruning VLANs Enabled: 2-1001
Capture Mode Disabled
Capture VLANs Allowed: ALL
Protected: false
Appliance trust: none

Name: Fa0/5
Switchport: Enabled
Administrative Mode: static access
Operational Mode: down
Administrative Trunking Encapsulation: dot1q
Negotiation of Trunking: Off
Access Mode VLAN: 20 (VLAN0020)
Trunking Native Mode VLAN: 1 (default)
Voice VLAN: none
Administrative private-vlan host-association: none
Administrative private-vlan mapping: none
Administrative private-vlan trunk native VLAN: none
Administrative private-vlan trunk encapsulation: dot1q
Administrative private-vlan trunk normal VLANs: none
Administrative private-vlan trunk private VLANs: none
Operational private-vlan: none
Trunking VLANs Enabled: ALL
Pruning VLANs Enabled: 2-1001
Capture Mode Disabled
Capture VLANs Allowed: ALL
Protected: false
Appliance trust: none

Name: Fa0/6
Switchport: Enabled
Administrative Mode: static access
Operational Mode: down
Administrative Trunking Encapsulation: dot1q
Negotiation of Trunking: Off
Access Mode VLAN: 20 (VLAN0020)
Trunking Native Mode VLAN: 1 (default)
```

```
Voice VLAN: none
Administrative private-vlan host-association: none
Administrative private-vlan mapping: none
Administrative private-vlan trunk native VLAN: none
Administrative private-vlan trunk encapsulation: dot1q
Administrative private-vlan trunk normal VLANs: none
Administrative private-vlan trunk private VLANs: none
Operational private-vlan: none
Trunking VLANs Enabled: ALL
Pruning VLANs Enabled: 2-1001
Capture Mode Disabled
Capture VLANs Allowed: ALL
Protected: false
Appliance trust: none

Name: Fa0/7
Switchport: Enabled
Administrative Mode: static access
Operational Mode: down
Administrative Trunking Encapsulation: dot1q
Negotiation of Trunking: Off
Access Mode VLAN: 20 (VLAN0020)
Trunking Native Mode VLAN: 1 (default)
Voice VLAN: none
Administrative private-vlan host-association: none
Administrative private-vlan mapping: none
Administrative private-vlan trunk native VLAN: none
Administrative private-vlan trunk encapsulation: dot1q
Administrative private-vlan trunk normal VLANs: none
Administrative private-vlan trunk private VLANs: none
Operational private-vlan: none
Trunking VLANs Enabled: ALL
Pruning VLANs Enabled: 2-1001
Capture Mode Disabled
Capture VLANs Allowed: ALL
Protected: false
Appliance trust: none

Name: Fa0/8
Switchport: Enabled
Administrative Mode: static access
Operational Mode: down
Administrative Trunking Encapsulation: dot1q
Negotiation of Trunking: Off
Access Mode VLAN: 20 (VLAN0020)
Trunking Native Mode VLAN: 1 (default)
Voice VLAN: none
Administrative private-vlan host-association: none
Administrative private-vlan mapping: none
Administrative private-vlan trunk native VLAN: none
Administrative private-vlan trunk encapsulation: dot1q
Administrative private-vlan trunk normal VLANs: none
Administrative private-vlan trunk private VLANs: none
Operational private-vlan: none
```

```
Trunking VLANs Enabled: ALL
Pruning VLANs Enabled: 2-1001
Capture Mode Disabled
Capture VLANs Allowed: ALL
Protected: false
Appliance trust: none

Name: Fa0/9
Switchport: Enabled
Administrative Mode: static access
Operational Mode: down
Administrative Trunking Encapsulation: dot1q
Negotiation of Trunking: Off
Access Mode VLAN: 20 (VLAN0020)
Trunking Native Mode VLAN: 1 (default)
Voice VLAN: none
Administrative private-vlan host-association: none
Administrative private-vlan mapping: none
Administrative private-vlan trunk native VLAN: none
Administrative private-vlan trunk encapsulation: dot1q
Administrative private-vlan trunk normal VLANs: none
Administrative private-vlan trunk private VLANs: none
Operational private-vlan: none
Trunking VLANs Enabled: ALL
Pruning VLANs Enabled: 2-1001
Capture Mode Disabled
Capture VLANs Allowed: ALL
Protected: false
Appliance trust: none

Name: Fa0/10
Switchport: Enabled
Administrative Mode: static access
Operational Mode: down
Administrative Trunking Encapsulation: dot1q
Negotiation of Trunking: Off
Access Mode VLAN: 20 (VLAN0020)
Trunking Native Mode VLAN: 1 (default)
Voice VLAN: none
Administrative private-vlan host-association: none
Administrative private-vlan mapping: none
Administrative private-vlan trunk native VLAN: none
Administrative private-vlan trunk encapsulation: dot1q
Administrative private-vlan trunk normal VLANs: none
Administrative private-vlan trunk private VLANs: none
Operational private-vlan: none
Trunking VLANs Enabled: ALL
Pruning VLANs Enabled: 2-1001
Capture Mode Disabled
Capture VLANs Allowed: ALL
Protected: false
Appliance trust: none

Name: Fa0/11
```

```
Switchport: Enabled
Administrative Mode: static access
Operational Mode: down
Administrative Trunking Encapsulation: dot1q
Negotiation of Trunking: Off
Access Mode VLAN: 20 (VLAN0020)
Trunking Native Mode VLAN: 1 (default)
Voice VLAN: none
Administrative private-vlan host-association: none
Administrative private-vlan mapping: none
Administrative private-vlan trunk native VLAN: none
Administrative private-vlan trunk encapsulation: dot1q
Administrative private-vlan trunk normal VLANs: none
Administrative private-vlan trunk private VLANs: none
Operational private-vlan: none
Trunking VLANs Enabled: ALL
Pruning VLANs Enabled: 2-1001
Capture Mode Disabled
Capture VLANs Allowed: ALL
Protected: false
Appliance trust: none

Name: Fa0/12
Switchport: Enabled
Administrative Mode: static access
Operational Mode: down
Administrative Trunking Encapsulation: dot1q
Negotiation of Trunking: Off
Access Mode VLAN: 20 (VLAN0020)
Trunking Native Mode VLAN: 1 (default)
Voice VLAN: none
Administrative private-vlan host-association: none
Administrative private-vlan mapping: none
Administrative private-vlan trunk native VLAN: none
Administrative private-vlan trunk encapsulation: dot1q
Administrative private-vlan trunk normal VLANs: none
Administrative private-vlan trunk private VLANs: none
Operational private-vlan: none
Trunking VLANs Enabled: ALL
Pruning VLANs Enabled: 2-1001
Capture Mode Disabled
Capture VLANs Allowed: ALL
Protected: false
Appliance trust: none

Name: Fa0/13
Switchport: Enabled
Administrative Mode: static access
Operational Mode: down
Administrative Trunking Encapsulation: dot1q
Negotiation of Trunking: Off
Access Mode VLAN: 20 (VLAN0020)
Trunking Native Mode VLAN: 1 (default)
Voice VLAN: none
```

```
Administrative private-vlan host-association: none
Administrative private-vlan mapping: none
Administrative private-vlan trunk native VLAN: none
Administrative private-vlan trunk encapsulation: dot1q
Administrative private-vlan trunk normal VLANs: none
Administrative private-vlan trunk private VLANs: none
Operational private-vlan: none
Trunking VLANs Enabled: ALL
Pruning VLANs Enabled: 2-1001
Capture Mode Disabled
Capture VLANs Allowed: ALL
Protected: false
Appliance trust: none

Name: Fa0/14
Switchport: Enabled
Administrative Mode: static access
Operational Mode: down
Administrative Trunking Encapsulation: dot1q
Negotiation of Trunking: Off
Access Mode VLAN: 20 (VLAN0020)
Trunking Native Mode VLAN: 1 (default)
Voice VLAN: none
Administrative private-vlan host-association: none
Administrative private-vlan mapping: none
Administrative private-vlan trunk native VLAN: none
Administrative private-vlan trunk encapsulation: dot1q
Administrative private-vlan trunk normal VLANs: none
Administrative private-vlan trunk private VLANs: none
Operational private-vlan: none
Trunking VLANs Enabled: ALL
Pruning VLANs Enabled: 2-1001
Capture Mode Disabled
Capture VLANs Allowed: ALL
Protected: false
Appliance trust: none

Name: Fa0/15
Switchport: Enabled
Administrative Mode: static access
Operational Mode: down
Administrative Trunking Encapsulation: dot1q
Negotiation of Trunking: Off
Access Mode VLAN: 20 (VLAN0020)
Trunking Native Mode VLAN: 1 (default)
Voice VLAN: none
Administrative private-vlan host-association: none
Administrative private-vlan mapping: none
Administrative private-vlan trunk native VLAN: none
Administrative private-vlan trunk encapsulation: dot1q
Administrative private-vlan trunk normal VLANs: none
Administrative private-vlan trunk private VLANs: none
Operational private-vlan: none
Trunking VLANs Enabled: ALL
```

```
Pruning VLANs Enabled: 2-1001
Capture Mode Disabled
Capture VLANs Allowed: ALL
Protected: false
Appliance trust: none

Name: Fa0/16
Switchport: Enabled
Administrative Mode: trunk
Operational Mode: trunk (member of bundle Po2)
Administrative Trunking Encapsulation: dot1q
Operational Trunking Encapsulation: dot1q
Negotiation of Trunking: On
Access Mode VLAN: 1 (default)
Trunking Native Mode VLAN: 1 (default)
Voice VLAN: none
Administrative private-vlan host-association: none
Administrative private-vlan mapping: none
Administrative private-vlan trunk native VLAN: none
Administrative private-vlan trunk encapsulation: dot1q
Administrative private-vlan trunk normal VLANs: none
Administrative private-vlan trunk private VLANs: none
Operational private-vlan: none
Trunking VLANs Enabled: 20,200
Pruning VLANs Enabled: 2-1001
Capture Mode Disabled
Capture VLANs Allowed: ALL
Protected: false
Appliance trust: none

Name: Fa0/17
Switchport: Enabled
Administrative Mode: trunk
Operational Mode: trunk (member of bundle Po2)
Administrative Trunking Encapsulation: dot1q
Operational Trunking Encapsulation: dot1q
Negotiation of Trunking: On
Access Mode VLAN: 1 (default)
Trunking Native Mode VLAN: 1 (default)
Voice VLAN: none
Administrative private-vlan host-association: none
Administrative private-vlan mapping: none
Administrative private-vlan trunk native VLAN: none
Administrative private-vlan trunk encapsulation: dot1q
Administrative private-vlan trunk normal VLANs: none
Administrative private-vlan trunk private VLANs: none
Operational private-vlan: none
Trunking VLANs Enabled: 20,200
Pruning VLANs Enabled: 2-1001
Capture Mode Disabled
Capture VLANs Allowed: ALL
Protected: false
Appliance trust: none
```

```
Name: Fa0/18
Switchport: Enabled
Administrative Mode: trunk
Operational Mode: trunk (member of bundle Po2)
Administrative Trunking Encapsulation: dot1q
Operational Trunking Encapsulation: dot1q
Negotiation of Trunking: On
Access Mode VLAN: 1 (default)
Trunking Native Mode VLAN: 1 (default)
Voice VLAN: none
Administrative private-vlan host-association: none
Administrative private-vlan mapping: none
Administrative private-vlan trunk native VLAN: none
Administrative private-vlan trunk encapsulation: dot1q
Administrative private-vlan trunk normal VLANs: none
Administrative private-vlan trunk private VLANs: none
Operational private-vlan: none
Trunking VLANs Enabled: 20,200
Pruning VLANs Enabled: 2-1001
Capture Mode Disabled
Capture VLANs Allowed: ALL
Protected: false
Appliance trust: none

Name: Fa0/19
Switchport: Enabled
Administrative Mode: trunk
Operational Mode: trunk (member of bundle Po1)
Administrative Trunking Encapsulation: dot1q
Operational Trunking Encapsulation: dot1q
Negotiation of Trunking: On
Access Mode VLAN: 1 (default)
Trunking Native Mode VLAN: 1 (default)
Voice VLAN: none
Administrative private-vlan host-association: none
Administrative private-vlan mapping: none
Administrative private-vlan trunk native VLAN: none
Administrative private-vlan trunk encapsulation: dot1q
Administrative private-vlan trunk normal VLANs: none
Administrative private-vlan trunk private VLANs: none
Operational private-vlan: none
Trunking VLANs Enabled: 20,200
Pruning VLANs Enabled: 2-1001
Capture Mode Disabled
Capture VLANs Allowed: ALL
Protected: false
Appliance trust: none

Name: Fa0/20
Switchport: Enabled
Administrative Mode: trunk
Operational Mode: trunk (member of bundle Po1)
Administrative Trunking Encapsulation: dot1q
Operational Trunking Encapsulation: dot1q
```

Negotiation of Trunking: On
Access Mode VLAN: 1 (default)
Trunking Native Mode VLAN: 1 (default)
Voice VLAN: none
Administrative private-vlan host-association: none
Administrative private-vlan mapping: none
Administrative private-vlan trunk native VLAN: none
Administrative private-vlan trunk encapsulation: dot1q
Administrative private-vlan trunk normal VLANs: none
Administrative private-vlan trunk private VLANs: none
Operational private-vlan: none
Trunking VLANs Enabled: 20,200
Pruning VLANs Enabled: 2-1001
Capture Mode Disabled
Capture VLANs Allowed: ALL
Protected: false
Appliance trust: none

Name: Fa0/21
Switchport: Enabled
Administrative Mode: trunk
Operational Mode: trunk (member of bundle Po1)
Administrative Trunking Encapsulation: dot1q
Operational Trunking Encapsulation: dot1q
Negotiation of Trunking: On
Access Mode VLAN: 1 (default)
Trunking Native Mode VLAN: 1 (default)
Voice VLAN: none
Administrative private-vlan host-association: none
Administrative private-vlan mapping: none
Administrative private-vlan trunk native VLAN: none
Administrative private-vlan trunk encapsulation: dot1q
Administrative private-vlan trunk normal VLANs: none
Administrative private-vlan trunk private VLANs: none
Operational private-vlan: none
Trunking VLANs Enabled: 20,200
Pruning VLANs Enabled: 2-1001
Capture Mode Disabled
Capture VLANs Allowed: ALL
Protected: false
Appliance trust: none

Name: Fa0/22
Switchport: Enabled
Administrative Mode: trunk
Operational Mode: down
Administrative Trunking Encapsulation: dot1q
Negotiation of Trunking: On
Access Mode VLAN: 1 (default)
Trunking Native Mode VLAN: 1 (default)
Voice VLAN: none
Administrative private-vlan host-association: none
Administrative private-vlan mapping: none
Administrative private-vlan trunk native VLAN: none

```
Administrative private-vlan trunk encapsulation: dot1q
Administrative private-vlan trunk normal VLANs: none
Administrative private-vlan trunk private VLANs: none
Operational private-vlan: none
Trunking VLANs Enabled: ALL
Pruning VLANs Enabled: 2-1001
Capture Mode Disabled
Capture VLANs Allowed: ALL
Protected: false
Appliance trust: none


Name: Fa0/23
Switchport: Enabled
Administrative Mode: trunk
Operational Mode: down
Administrative Trunking Encapsulation: dot1q
Negotiation of Trunking: On
Access Mode VLAN: 1 (default)
Trunking Native Mode VLAN: 1 (default)
Voice VLAN: none
Administrative private-vlan host-association: none
Administrative private-vlan mapping: none
Administrative private-vlan trunk native VLAN: none
Administrative private-vlan trunk encapsulation: dot1q
Administrative private-vlan trunk normal VLANs: none
Administrative private-vlan trunk private VLANs: none
Operational private-vlan: none
Trunking VLANs Enabled: ALL
Pruning VLANs Enabled: 2-1001
Capture Mode Disabled
Capture VLANs Allowed: ALL
Protected: false
Appliance trust: none


Name: Fa0/24
Switchport: Enabled
Administrative Mode: trunk
Operational Mode: down
Administrative Trunking Encapsulation: dot1q
Negotiation of Trunking: On
Access Mode VLAN: 1 (default)
Trunking Native Mode VLAN: 1 (default)
Voice VLAN: none
Administrative private-vlan host-association: none
Administrative private-vlan mapping: none
Administrative private-vlan trunk native VLAN: none
Administrative private-vlan trunk encapsulation: dot1q
Administrative private-vlan trunk normal VLANs: none
Administrative private-vlan trunk private VLANs: none
Operational private-vlan: none
Trunking VLANs Enabled: ALL
Pruning VLANs Enabled: 2-1001
Capture Mode Disabled
Capture VLANs Allowed: ALL
```

```
Protected: false
Appliance trust: none

Name: Po1
Switchport: Enabled
Administrative Mode: trunk
Operational Mode: trunk
Administrative Trunking Encapsulation: dot1q
Operational Trunking Encapsulation: dot1q
Negotiation of Trunking: On
Access Mode VLAN: 1 (default)
Trunking Native Mode VLAN: 1 (default)
Voice VLAN: none
Administrative private-vlan host-association: none
Administrative private-vlan mapping: none
Administrative private-vlan trunk native VLAN: none
Administrative private-vlan trunk encapsulation: dot1q
Administrative private-vlan trunk normal VLANs: none
Administrative private-vlan trunk private VLANs: none
Operational private-vlan: none
Trunking VLANs Enabled: 20,200
Pruning VLANs Enabled: 2-1001
Protected: false
Appliance trust: none

Name: Po2
Switchport: Enabled
Administrative Mode: trunk
Operational Mode: trunk
Administrative Trunking Encapsulation: dot1q
Operational Trunking Encapsulation: dot1q
Negotiation of Trunking: On
Access Mode VLAN: 1 (default)
Trunking Native Mode VLAN: 1 (default)
Voice VLAN: none
Administrative private-vlan host-association: none
Administrative private-vlan mapping: none
Administrative private-vlan trunk native VLAN: none
Administrative private-vlan trunk encapsulation: dot1q
Administrative private-vlan trunk normal VLANs: none
Administrative private-vlan trunk private VLANs: none
Operational private-vlan: none
Trunking VLANs Enabled: 20,200
Pruning VLANs Enabled: 2-1001
Protected: false
Appliance trust: none
ASW2#
```

```
ASW2#show interfaces trunk

Port         Mode            Encapsulation  Status        Native vlan
Po1          on              802.1q         trunking      1
Po2          on              802.1q         trunking      1

Port         Vlans allowed on trunk
Po1          20,200
Po2          20,200

Port         Vlans allowed and active in management domain
Po1          20,200
Po2          20,200

Port         Vlans in spanning tree forwarding state and not pruned
Po1          20,200
Po2          20,200
ASW2#
```

```
ASW2#show vtp status
VTP Version                   : 2
Configuration Revision        : 36
Maximum VLANs supported locally : 64
Number of existing VLANs      : 8
VTP Operating Mode            : Server
VTP Domain Name               : netlearning
VTP Pruning Mode              : Disabled
VTP V2 Mode                   : Enabled
VTP Traps Generation          : Disabled
MD5 digest                    : 0x3A 0xD8 0x7D 0x4B 0xF5 0x78 0x54 0xCE
Configuration last modified by 10.2.1.1 at 3-1-93 00:50:15
Local updater ID is 192.168.1.132 on interface Vl200 (lowest numbered
VLAN interface found)
ASW2#
```

```
ASW2#show vtp password
VTP Password: cisco
ASW2#
```

```
ASW2#show etherchannel detail
                Channel-group listing:
                ----------------------

Group: 1
----------
Group state = L2
Ports: 3   Maxports = 8
Port-channels: 1 Max Port-channels = 1
Protocol:   PAgP
                Ports in the group:
                -------------------
Port: Fa0/19
------------

Port state     = Up Mstr In-Bndl
Channel group = 1              Mode = Desirable-Sl    Gcchange = 0
Port-channel  = Po1            GC   = 0x00010001      Pseudo port-channel =
Po1
Port index    = 0             Load = 0x00            Protocol =    PAgP

Flags:  S - Device is sending Slow hello.  C - Device is in Consistent
state.
```

```
        A - Device is in Auto mode.       P - Device learns on physical
port.
        d - PAgP is down.
Timers: H - Hello timer is running.       Q - Quit timer is running.
        S - Switching timer is running.   I - Interface timer is
running.

Local information:
                                Hello     Partner  PAgP     Learning
Group
Port         Flags State   Timers Interval Count    Priority  Method
Ifindex
Fa0/19       SC    U6/S7   H       30s     1        128       Any      27

Partner's information:

             Partner                 Partner              Partner           Partner
Group
Port         Name                    Device ID            Port         Age Flags
Cap.
Fa0/19       DSW2                    000b.fd20.ba00       Fa0/16       18s SC
180001

Age of the port in the current state: 0d:02h:06m:57s

Port: Fa0/20
------------

Port state     = Up Mstr In-Bndl
Channel group = 1            Mode = Desirable-Sl   Gcchange = 0
Port-channel  = Po1          GC   = 0x00010001     Pseudo port-channel =
Po1
Port index    = 0            Load = 0x00            Protocol =   PAgP

Flags:  S - Device is sending Slow hello.  C - Device is in Consistent
state.
        A - Device is in Auto mode.       P - Device learns on physical
port.
        d - PAgP is down.
Timers: H - Hello timer is running.       Q - Quit timer is running.
        S - Switching timer is running.   I - Interface timer is
running.

Local information:
                                Hello     Partner  PAgP     Learning
Group
Port         Flags State   Timers Interval Count    Priority  Method
Ifindex
Fa0/20       SC    U6/S7   H       30s     1        128       Any      27

Partner's information:

             Partner                 Partner              Partner           Partner
Group
```

```
Port        Name                        Device ID         Port        Age  Flags
Cap.
Fa0/20    DSW2                          000b.fd20.ba00   Fa0/17       10s SC
180001
```

Age of the port in the current state: 0d:02h:06m:58s

Port: Fa0/21

```
Port state    = Up Mstr In-Bndl
Channel group = 1              Mode = Desirable-Sl    Gcchange = 0
Port-channel = Po1            GC   = 0x00010001      Pseudo port-channel =
Po1
Port index    = 0            Load = 0x00            Protocol =   PAgP
```

```
Flags:  S - Device is sending Slow hello.  C - Device is in Consistent
state.
        A - Device is in Auto mode.        P - Device learns on physical
port.
        d - PAgP is down.
Timers: H - Hello timer is running.       Q - Quit timer is running.
        S - Switching timer is running.   I - Interface timer is
running.
```

Local information:
```
                                  Hello    Partner  PAgP      Learning
Group
Port        Flags State   Timers  Interval Count    Priority  Method
Ifindex
Fa0/21     SC    U6/S7   H        30s      1        128        Any       27
```

Partner's information:

```
           Partner                  Partner           Partner           Partner
Group
Port        Name                    Device ID         Port        Age  Flags
Cap.
Fa0/21    DSW2                      000b.fd20.ba00   Fa0/18       18s SC
180001
```

Age of the port in the current state: 0d:02h:07m:00s

```
                Port-channels in the group:
                ---------------------------
```

Port-channel: Po1

```
Age of the Port-channel   = 0d:02h:09m:21s
Logical slot/port   = 1/0          Number of ports = 3
GC                  = 0x00010001      HotStandBy port = null
Port state          = Port-channel Ag-Inuse
Protocol            =   PAgP
```

```
Ports in the Port-channel:

Index   Load    Port     EC state         No of bits
------+-----+-----+----------------+----------
   0     00     Fa0/19   Desirable-Sl        0
   0     00     Fa0/20   Desirable-Sl        0
   0     00     Fa0/21   Desirable-Sl        0

Time since last port bundled:    0d:02h:07m:01s    Fa0/19

Group: 2
----------
Group state = L2
Ports: 3   Maxports = 8
Port-channels: 1 Max Port-channels = 1
Protocol:   PAgP
              Ports in the group:
              -------------------
Port: Fa0/16
------------

Port state     = Up Mstr In-Bndl
Channel group = 2              Mode = Desirable-Sl    Gcchange = 0
Port-channel  = Po2            GC   = 0x00020001      Pseudo port-channel =
Po2
Port index    = 0             Load = 0x00          Protocol =   PAgP

Flags:  S - Device is sending Slow hello.  C - Device is in Consistent
state.
        A - Device is in Auto mode.        P - Device learns on physical
port.
        d - PAgP is down.
Timers: H - Hello timer is running.      Q - Quit timer is running.
        S - Switching timer is running.    I - Interface timer is
running.

Local information:
                               Hello    Partner  PAgP     Learning
Group
Port        Flags State   Timers Interval Count   Priority  Method
Ifindex
Fa0/16      SC    U6/S7   H       30s      1       128       Any       28

Partner's information:

            Partner                Partner            Partner            Partner
Group
Port        Name                   Device ID          Port       Age Flags
Cap.
Fa0/16      DSW1                   000d.bde3.6e00     Fa0/16     24s SAC
E0001

Age of the port in the current state: 0d:02h:07m:51s
```

```
Port: Fa0/17
------------

Port state     = Up Mstr In-Bndl
Channel group = 2              Mode = Desirable-Sl    Gcchange = 0
Port-channel  = Po2            GC   = 0x00020001      Pseudo port-channel =
Po2
Port index    = 0              Load = 0x00            Protocol =   PAgP

Flags:  S - Device is sending Slow hello.  C - Device is in Consistent
state.
        A - Device is in Auto mode.       P - Device learns on physical
port.
        d - PAgP is down.
Timers: H - Hello timer is running.       Q - Quit timer is running.
        S - Switching timer is running.   I - Interface timer is
running.

Local information:
                                 Hello    Partner  PAgP      Learning
Group
Port        Flags State   Timers  Interval Count   Priority  Method
Ifindex
Fa0/17      SC    U6/S7   H       30s      1       128       Any      28

Partner's information:

            Partner                Partner           Partner          Partner
Group
Port        Name                   Device ID         Port       Age  Flags
Cap.
Fa0/17      DSW1                   000d.bde3.6e00    Fa0/17     24s SAC
E0001

Age of the port in the current state: 0d:02h:07m:52s

Port: Fa0/18
------------

Port state     = Up Mstr In-Bndl
Channel group = 2              Mode = Desirable-Sl    Gcchange = 0
Port-channel  = Po2            GC   = 0x00020001      Pseudo port-channel =
Po2
Port index    = 0              Load = 0x00            Protocol =   PAgP

Flags:  S - Device is sending Slow hello.  C - Device is in Consistent
state.
        A - Device is in Auto mode.       P - Device learns on physical
port.
        d - PAgP is down.
Timers: H - Hello timer is running.       Q - Quit timer is running.
        S - Switching timer is running.   I - Interface timer is
running.
```

```
Local information:
                                Hello      Partner  PAgP      Learning    Group
Port          Flags State   Timers  Interval Count   Priority  Method    Ifindex
Fa0/18        SC    U6/S7   H       30s      1       128       Any        28

Partner's information:

              Partner                 Partner             Partner          Partner    Group
Port          Name                    Device ID           Port         Age Flags   Cap.
Fa0/18        DSW1                    000d.bde3.6e00      Fa0/18       16s SAC    E0001

Age of the port in the current state: 0d:02h:07m:54s

                Port-channels in the group:
                --------------------------

Port-channel: Po2
------------

Age of the Port-channel   = 0d:02h:09m:25s
Logical slot/port   = 1/1          Number of ports = 3
GC                  = 0x00020001      HotStandBy port = null
Port state          = Port-channel Ag-Inuse
Protocol            =   PAgP

Ports in the Port-channel:

Index   Load   Port    EC state        No of bits
------+-----+-----+----------------+----------
  0      00    Fa0/16  Desirable-Sl       0
  0      00    Fa0/17  Desirable-Sl       0
  0      00    Fa0/18  Desirable-Sl       0

Time since last port bundled:    0d:02h:07m:55s    Fa0/18

ASW2#
```

```
ASW2#show spanning-tree inconsistentports

Name                   Interface              Inconsistency
---------------------- ---------------------- ------------------

Number of inconsistent ports (segments) in the system : 0

ASW2#
```

```
ASW2#show spanning-tree summary
Switch is in pvst mode
Root bridge for: none
EtherChannel misconfig guard is enabled
Extended system ID         is enabled
Portfast Default           is disabled
PortFast BPDU Guard Default  is disabled
Portfast BPDU Filter Default is disabled
Loopguard Default          is disabled
UplinkFast                 is disabled
BackboneFast               is disabled
Pathcost method used       is short

Name                     Blocking Listening Learning Forwarding STP Active
---------------------- -------- --------- -------- ---------- ----------
VLAN0020                      0         0        0          2          2
VLAN0200                      0         0        0          2          2
---------------------- -------- --------- -------- ---------- ----------
2 vlans                       0         0        0          4          4
ASW2#
```

```
ASW2#show udld

Interface Fa0/1
---
Port enable administrative configuration setting: Disabled
Port enable operational state: Disabled
Current bidirectional state: Unknown

Interface Fa0/2
---
Port enable administrative configuration setting: Disabled
Port enable operational state: Disabled
Current bidirectional state: Unknown

Interface Fa0/3
---
Port enable administrative configuration setting: Disabled
Port enable operational state: Disabled
Current bidirectional state: Unknown

Interface Fa0/4
---
Port enable administrative configuration setting: Disabled
```

```
Port enable operational state: Disabled
Current bidirectional state: Unknown

Interface Fa0/5
---
Port enable administrative configuration setting: Disabled
Port enable operational state: Disabled
Current bidirectional state: Unknown

Interface Fa0/6
---
Port enable administrative configuration setting: Disabled
Port enable operational state: Disabled
Current bidirectional state: Unknown

Interface Fa0/7
---
Port enable administrative configuration setting: Disabled
Port enable operational state: Disabled
Current bidirectional state: Unknown

Interface Fa0/8
---
Port enable administrative configuration setting: Disabled
Port enable operational state: Disabled
Current bidirectional state: Unknown

Interface Fa0/9
---
Port enable administrative configuration setting: Disabled
Port enable operational state: Disabled
Current bidirectional state: Unknown

Interface Fa0/10
---
Port enable administrative configuration setting: Disabled
Port enable operational state: Disabled
Current bidirectional state: Unknown

Interface Fa0/11
---
Port enable administrative configuration setting: Disabled
Port enable operational state: Disabled
Current bidirectional state: Unknown

Interface Fa0/12
---
Port enable administrative configuration setting: Disabled
Port enable operational state: Disabled
Current bidirectional state: Unknown

Interface Fa0/13
---
Port enable administrative configuration setting: Disabled
```

```
Port enable operational state: Disabled
Current bidirectional state: Unknown

Interface Fa0/14
---
Port enable administrative configuration setting: Disabled
Port enable operational state: Disabled
Current bidirectional state: Unknown

Interface Fa0/15
---
Port enable administrative configuration setting: Disabled
Port enable operational state: Disabled
Current bidirectional state: Unknown

Interface Fa0/16
---
Port enable administrative configuration setting: Disabled
Port enable operational state: Disabled
Current bidirectional state: Unknown

Interface Fa0/17
---
Port enable administrative configuration setting: Disabled
Port enable operational state: Disabled
Current bidirectional state: Unknown

Interface Fa0/18
---
Port enable administrative configuration setting: Disabled
Port enable operational state: Disabled
Current bidirectional state: Unknown

Interface Fa0/19
---
Port enable administrative configuration setting: Disabled
Port enable operational state: Disabled
Current bidirectional state: Unknown

Interface Fa0/20
---
Port enable administrative configuration setting: Disabled
Port enable operational state: Disabled
Current bidirectional state: Unknown

Interface Fa0/21
---
Port enable administrative configuration setting: Disabled
Port enable operational state: Disabled
Current bidirectional state: Unknown

Interface Fa0/22
---
Port enable administrative configuration setting: Disabled
```

```
Port enable operational state: Disabled
Current bidirectional state: Unknown

Interface Fa0/23
---
Port enable administrative configuration setting: Disabled
Port enable operational state: Disabled
Current bidirectional state: Unknown

Interface Fa0/24
---
Port enable administrative configuration setting: Disabled
Port enable operational state: Disabled
Current bidirectional state: Unknown
ASW2#
```

```
ASW2#show etherchannel summary
Flags:  D - down         P - in port-channel
        I - stand-alone s - suspended
        H - Hot-standby (LACP only)
        R - Layer3       S - Layer2
        u - unsuitable for bundling
        U - in use       f - failed to allocate aggregator
        d - default port

Number of channel-groups in use: 2
Number of aggregators:           2

Group  Port-channel  Protocol    Ports
------+-----------+----------+-----------------------------------------
----
1      Po1(SU)          PAgP       Fa0/19(P)   Fa0/20(Pd)  Fa0/21(P)
2      Po2(SU)          PAgP       Fa0/16(Pd)  Fa0/17(P)   Fa0/18(P)

ASW2#
```

```
ASW2#show etherchannel protocol
                Channel-group listing:
                ----------------------

Group: 1
----------
Protocol:  PAgP

Group: 2
----------
Protocol:  PAgP

ASW2#
```

```
ASW2#show etherchannel port
                Channel-group listing:
                ----------------------

Group: 1
----------
                Ports in the group:
                -------------------
Port: Fa0/19
------------

Port state    = Up Mstr In-Bndl
Channel group = 1              Mode = Desirable-Sl    Gcchange = 0
Port-channel  = Po1            GC   = 0x00010001      Pseudo port-channel =
Po1
Port index    = 0              Load = 0x00            Protocol =   PAgP

Flags:  S - Device is sending Slow hello.  C - Device is in Consistent
state.
        A - Device is in Auto mode.        P - Device learns on physical
port.
        d - PAgP is down.
Timers: H - Hello timer is running.      Q - Quit timer is running.
        S - Switching timer is running.    I - Interface timer is
running.

Local information:
                                    Hello    Partner  PAgP     Learning
Group
Port         Flags State   Timers  Interval Count   Priority  Method
Ifindex
Fa0/19       SC    U6/S7   H       30s      1       128       Any      27

Partner's information:

          Partner                Partner            Partner          Partner
Group
Port       Name                  Device ID          Port       Age  Flags
Cap.
Fa0/19     DSW2                  000b.fd20.ba00     Fa0/16     12s  SC
180001

Age of the port in the current state: 0d:02h:07m:49s


Port: Fa0/20
------------
```

```
Port state     = Up Mstr In-Bndl
Channel group = 1              Mode = Desirable-Sl     Gcchange = 0
Port-channel  = Po1            GC   = 0x00010001       Pseudo port-channel =
Po1
Port index    = 0              Load = 0x00             Protocol =    PAgP

Flags:  S - Device is sending Slow hello.  C - Device is in Consistent
state.
        A - Device is in Auto mode.       P - Device learns on physical
port.
        d - PAgP is down.
Timers: H - Hello timer is running.       Q - Quit timer is running.
        S - Switching timer is running.   I - Interface timer is
running.

Local information:
                                Hello     Partner  PAgP     Learning
Group
Port        Flags State   Timers Interval Count    Priority  Method
Ifindex
Fa0/20      SC    U6/S7   H       30s      1        128       Any       27

Partner's information:

            Partner                 Partner          Partner         Partner
Group
Port        Name                    Device ID        Port        Age  Flags
Cap.
Fa0/20      DSW2                    000b.fd20.ba00   Fa0/17       6s SC
180001

Age of the port in the current state: 0d:02h:07m:51s

Port: Fa0/21
------------

Port state     = Up Mstr In-Bndl
Channel group = 1              Mode = Desirable-Sl     Gcchange = 0
Port-channel  = Po1            GC   = 0x00010001       Pseudo port-channel =
Po1
Port index    = 0              Load = 0x00             Protocol =    PAgP

Flags:  S - Device is sending Slow hello.  C - Device is in Consistent
state.
        A - Device is in Auto mode.       P - Device learns on physical
port.
        d - PAgP is down.
Timers: H - Hello timer is running.       Q - Quit timer is running.
        S - Switching timer is running.   I - Interface timer is
running.

Local information:
```

```
                                      Hello     Partner   PAgP      Learning      Group
Port         Flags State    Timers   Interval  Count     Priority  Method        Ifindex
Fa0/21       SC    U6/S7    H        30s       1         128       Any           27

Partner's information:

             Partner                 Partner              Partner           Partner        Group
Port         Name                    Device ID            Port       Age    Flags          Cap.
Fa0/21       DSW2                    000b.fd20.ba00       Fa0/18     13s    SC             180001

Age of the port in the current state: 0d:02h:07m:52s


Group: 2
----------
             Ports in the group:
             -------------------
Port: Fa0/16
------------

Port state     = Up Mstr In-Bndl
Channel group = 2             Mode = Desirable-Sl    Gcchange = 0
Port-channel  = Po2           GC   = 0x00020001      Pseudo port-channel = Po2
Port index    = 0             Load = 0x00            Protocol =   PAgP

Flags:  S - Device is sending Slow hello.  C - Device is in Consistent state.
        A - Device is in Auto mode.        P - Device learns on physical port.
        d - PAgP is down.
Timers: H - Hello timer is running.        Q - Quit timer is running.
        S - Switching timer is running.    I - Interface timer is running.

Local information:
                                      Hello     Partner   PAgP      Learning      Group
Port         Flags State    Timers   Interval  Count     Priority  Method        Ifindex
Fa0/16       SC    U6/S7    H        30s       1         128       Any           28

Partner's information:

             Partner                 Partner              Partner           Partner        Group
Port         Name                    Device ID            Port       Age    Flags          Cap.
```

```
Fa0/16      DSW1                      000d.bde3.6e00   Fa0/16       21s SAC
E0001

Age of the port in the current state: 0d:02h:08m:42s

Port: Fa0/17
------------

Port state     = Up Mstr In-Bndl
Channel group = 2              Mode = Desirable-Sl    Gcchange = 0
Port-channel  = Po2            GC   = 0x00020001      Pseudo port-channel =
Po2
Port index     = 0             Load = 0x00            Protocol =   PAgP

Flags:  S - Device is sending Slow hello.  C - Device is in Consistent
state.
        A - Device is in Auto mode.        P - Device learns on physical
port.
        d - PAgP is down.
Timers: H - Hello timer is running.        Q - Quit timer is running.
        S - Switching timer is running.    I - Interface timer is
running.

Local information:
                                Hello     Partner  PAgP      Learning
Group
Port        Flags State    Timers  Interval Count    Priority   Method
Ifindex
Fa0/17     SC    U6/S7    H         30s      1        128        Any      28

Partner's information:

           Partner                 Partner            Partner          Partner
Group
Port       Name                    Device ID          Port        Age Flags
Cap.
Fa0/17     DSW1                    000d.bde3.6e00   Fa0/17       19s SAC
E0001

Age of the port in the current state: 0d:02h:08m:43s

Port: Fa0/18
------------

Port state     = Up Mstr In-Bndl
Channel group = 2              Mode = Desirable-Sl    Gcchange = 0
Port-channel  = Po2            GC   = 0x00020001      Pseudo port-channel =
Po2
Port index     = 0             Load = 0x00            Protocol =   PAgP

Flags:  S - Device is sending Slow hello.  C - Device is in Consistent
state.
        A - Device is in Auto mode.        P - Device learns on physical
port.
```

```
        d - PAgP is down.
Timers: H - Hello timer is running.      Q - Quit timer is running.
        S - Switching timer is running.   I - Interface timer is
running.

Local information:
                                Hello    Partner  PAgP      Learning
Group
Port         Flags State   Timers  Interval Count   Priority  Method
Ifindex
Fa0/18       SC    U6/S7   H       30s     1        128        Any       28

Partner's information:

             Partner                Partner           Partner          Partner
Group
Port         Name                   Device ID         Port       Age  Flags
Cap.
Fa0/18       DSW1                   000d.bde3.6e00    Fa0/18     13s SAC
E0001

Age of the port in the current state: 0d:02h:08m:45s


ASW2#
```

```
ASW2#show etherchannel load-balance
Source MAC address
ASW2#
```

```
ASW2#show etherchannel port-channel
              Channel-group listing:
              ----------------------

Group: 1
----------
              Port-channels in the group:
              ---------------------------

Port-channel: Po1
------------

Age of the Port-channel   = 0d:02h:10m:28s
Logical slot/port   = 1/0             Number of ports = 3
GC                  = 0x00010001      HotStandBy port = null
Port state          = Port-channel Ag-Inuse
Protocol            =    PAgP

Ports in the Port-channel:

Index   Load   Port     EC state          No of bits
------+-----+-----+----------------+----------
  0      00    Fa0/19  Desirable-Sl        0
  0      00    Fa0/20  Desirable-Sl        0
  0      00    Fa0/21  Desirable-Sl        0

Time since last port bundled:    0d:02h:08m:08s    Fa0/19


Group: 2
----------
              Port-channels in the group:
              ---------------------------

Port-channel: Po2
------------

Age of the Port-channel   = 0d:02h:10m:28s
Logical slot/port   = 1/1             Number of ports = 3
GC                  = 0x00020001      HotStandBy port = null
Port state          = Port-channel Ag-Inuse
Protocol            =    PAgP

Ports in the Port-channel:

Index   Load   Port     EC state          No of bits
------+-----+-----+----------------+----------
  0      00    Fa0/16  Desirable-Sl        0
  0      00    Fa0/17  Desirable-Sl        0
  0      00    Fa0/18  Desirable-Sl        0

Time since last port bundled:    0d:02h:08m:58s    Fa0/18
```

```
ASW2#
```


```
ASW2#show pagp neighbor
Flags:  S - Device is sending Slow hello.  C - Device is in Consistent
state.
        A - Device is in Auto mode.        P - Device learns on physical
port.

Channel group 1 neighbors
          Partner                Partner               Partner          Partner
Group
Port      Name                   Device ID           Port          Age  Flags
Cap.
```

```
Fa0/19    DSW2                000b.fd20.ba00   Fa0/16      8s SC
180001
Fa0/20    DSW2                000b.fd20.ba00   Fa0/17      3s SC
180001
Fa0/21    DSW2                000b.fd20.ba00   Fa0/18      9s SC
180001

Channel group 2 neighbors
          Partner             Partner          Partner         Partner
Group
Port      Name                Device ID        Port     Age  Flags
Cap.
Fa0/16    DSW1                000d.bde3.6e00   Fa0/16     14s SAC
E0001
Fa0/17    DSW1                000d.bde3.6e00   Fa0/17     13s SAC
E0001
Fa0/18    DSW1                000d.bde3.6e00   Fa0/18      2s SAC
E0001
ASW2#
```

```
ASW2#show lacp neighbor

ASW2#
```

```
ASW2#show port-security
Secure Port  MaxSecureAddr  CurrentAddr  SecurityViolation  Security
Action
                 (Count)       (Count)          (Count)
```

```
--------------------------------------------------------------------------
--
      Fa0/1                   1               0                 0
Shutdown
      Fa0/2                   1               0                 0
Shutdown
      Fa0/3                   1               0                 0
Shutdown
      Fa0/4                   1               0                 0
Shutdown
      Fa0/5                   1               0                 0
Shutdown
      Fa0/6                   1               0                 0
Shutdown
      Fa0/7                   1               0                 0
Shutdown
      Fa0/8                   1               0                 0
Shutdown
      Fa0/9                   1               0                 0
Shutdown
     Fa0/10                   1               0                 0
Shutdown
     Fa0/11                   1               0                 0
Shutdown
     Fa0/12                   1               0                 0
Shutdown
     Fa0/13                   1               0                 0
Shutdown
     Fa0/14                   1               0                 0
Shutdown
     Fa0/15                   1               0                 0
Shutdown
--------------------------------------------------------------------------
--
Total Addresses in System (excluding one mac per port)     : 0
Max Addresses limit in System (excluding one mac per port) : 1024

ASW2#
```

```
ASW2#show port-security address
          Secure Mac Address Table
-------------------------------------------------------------------
Vlan     Mac Address        Type                  Ports   Remaining Age
                                                           (mins)
----     -----------        ----                  -----   ------------
-------------------------------------------------------------------
Total Addresses in System (excluding one mac per port)      : 0
Max Addresses limit in System (excluding one mac per port) : 1024

ASW2#
```