

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

ASW2#

CPU utilization for five seconds: 1%/0%; one minute: 2%; five minutes: 1%

PID	Runtime(ms)	Invoked	uSecs	5Sec	1Min	5Min	TTY	Process
-----	-------------	---------	-------	------	------	------	-----	---------

Process	Private (MB)	Shared (MB)	Page Faults	Page Faults/sec	Page Faults/MB	Page Faults/MB-sec	Page Faults/MB-sec
1 Manager	0	1	0	0.00%	0.00%	0.00%	0 Chunk
2	4	1517	2	0.00%	0.00%	0.00%	0 Load Meter
3	880	137	6423	0.00%	0.00%	0.00%	0 SpanTree
4 Helper	2048	767	2670	0.00%	0.01%	0.00%	0 Check
5 heaps	8	3	2666	0.00%	0.00%	0.00%	0 Pool
6 Manager	4	2	2000	0.00%	0.00%	0.00%	0 Timers
7	40	3	13333	0.00%	0.00%	0.00%	0 Entity MIB
8 API	12	1896	6	0.00%	0.00%	0.00%	0 HC Counter
9 Timer	12	136	88	0.00%	0.00%	0.00%	0 ARP Input
10	0	3	0	0.00%	0.00%	0.00%	0 Net Input
11	0	1	0	0.00%	0.00%	0.00%	0 Critical
12 Bkgnd	2556	4228	604	0.08%	0.01%	0.00%	0 Net
13 Background	16	124	129	0.00%	0.00%	0.00%	0 Logger
14	76	7574	10	0.00%	0.00%	0.00%	0 TTY
15 Background	24	7584	3	0.00%	0.00%	0.00%	0 Per-Second
16 Jobs	24	1518	15	0.00%	0.00%	0.00%	0 Compute
17 load avg	1068	127	8409	0.00%	0.01%	0.00%	0 Per-minute
18 Jobs	8	60	133	0.00%	0.00%	0.00%	0 AggMgr
19 Process	0	2	0	0.00%	0.00%	0.00%	0 Calhoun
20 Storm Co	732	189418	3	0.08%	0.01%	0.00%	0 Calhoun
21 LED Proc	60428	15037	4018	0.81%	0.79%	0.77%	0 Calhoun

22	44	37882	1	0.00%	0.00%	0.00%	0	HMATM
Learn proc								
23	1156	45	25688	0.00%	0.00%	0.00%	0	CalhounPM
24	320	37888	8	0.00%	0.00%	0.00%	0	Link
Status Proc								
25	32	37891	0	0.00%	0.00%	0.00%	0	Calhoun
PHY Loop								
26	0	1	0	0.00%	0.00%	0.00%	0	
CalhounInsIpo								
27	0	1	0	0.00%	0.00%	0.00%	0	Calhoun
DHCP Sno								
28	1260	1821	691	0.00%	0.02%	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	1572	2852	551	0.00%	0.00%	0.00%	0	DTP
Protocol								
32	0	760	0	0.00%	0.00%	0.00%	0	Ethchnl
33	152	92	1652	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	72	66	1090	0.00%	0.00%	0.00%	0	VMATM
Callback								
36	10204	15253	668	0.00%	0.02%	0.04%	0	Spanning
Tree								
37	64	7582	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	24	56	428	0.00%	0.00%	0.00%	0	L2MM
46	240	636	377	0.00%	0.00%	0.00%	0	MRD
47	52	148	351	0.00%	0.00%	0.00%	0	IGMPSN
48	96	147	653	0.00%	0.00%	0.00%	0	IGMP
Snooping Pr								
49	268	651	411	0.00%	0.00%	0.00%	0	IGMP
Snooping Re								
50	816	3195	255	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	0	759	0	0.00%	0.00%	0.00%	0	Cluster
RARP								

54	544	1715	317	0.16%	0.02%	0.00%	0 Cluster
Base							
55	1372	220	6236	0.49%	1.53%	0.39%	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	492	11487	42	0.00%	0.00%	0.00%	0 PM
Callback							
61	16	93	172	0.00%	0.00%	0.00%	0 VTP Trap
Process							
62	0	2144	0	0.00%	0.00%	0.00%	0 DHCPD
Database							
63	80	7583	10	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	2412	3632	664	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 01:05:54, 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 9000 bits/sec, 1 packets/sec
    15355 packets input, 1305670 bytes, 0 no buffer
    Received 5 broadcasts (0 IP multicast)
    0 runts, 0 giants, 0 throttles
    0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
    17726 packets output, 10755054 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 02:06:33, 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

FastEthernet0/2 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 02:06:35, 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
FastEthernet0/3 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 02:06:37, 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 02:06:38, 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
FastEthernet0/5 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 02:06:40, 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
FastEthernet0/6 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 02:06:42, 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 02:06:43, 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 02:06:45, 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 02:06:46, 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 02:06:48, 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 02:06:49, 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 02:06:51, 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 02:06:52, 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

FastEthernet0/14 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 02:06:54, 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

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 02:06:56, 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 00:00:16, 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
    3318 packets input, 300227 bytes, 0 no buffer
    Received 2537 broadcasts (0 multicast)
    0 runs, 0 giants, 0 throttles
    0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
    0 watchdog, 2523 multicast, 0 pause input
    0 input packets with dribble condition detected
    2708 packets output, 255320 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 00:00:23, output 00:00:03, 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
    1356 packets input, 135114 bytes, 0 no buffer
    Received 656 broadcasts (0 multicast)
    0 runs, 0 giants, 0 throttles
    0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
    0 watchdog, 655 multicast, 0 pause input
    0 input packets with dribble condition detected
```

```
6835 packets output, 568245 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 00:00:20, output 00:00:05, 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
4860 packets input, 387836 bytes, 0 no buffer
Received 4160 broadcasts (0 multicast)
0 runts, 0 giants, 0 throttles
0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
0 watchdog, 4160 multicast, 0 pause input
0 input packets with dribble condition detected
2015 packets output, 201236 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 00:00:12, 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
3608 packets input, 325050 bytes, 0 no buffer
Received 2721 broadcasts (0 multicast)
0 runts, 0 giants, 0 throttles
0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
```

```
0 watchdog, 2720 multicast, 0 pause input
0 input packets with dribble condition detected
1540 packets output, 154608 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 00:00:14, output 00:00:08, 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
1416 packets input, 141590 bytes, 0 no buffer
Received 654 broadcasts (0 multicast)
0 runts, 0 giants, 0 throttles
0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
0 watchdog, 654 multicast, 0 pause input
0 input packets with dribble condition detected
6980 packets output, 570357 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 00:00:16, 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
5443 packets input, 431332 bytes, 0 no buffer
Received 4694 broadcasts (0 multicast)
```

```

    0 runts, 0 giants, 0 throttles
    0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
    0 watchdog, 4695 multicast, 0 pause input
    0 input packets with dribble condition detected
    1542 packets output, 155051 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 02:07:06, 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
    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 02:07:08, 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 02:07:10, 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 0 bits/sec, 0 packets/sec
5 minute output rate 0 bits/sec, 0 packets/sec
  10462 packets input, 897754 bytes, 0 no buffer
  Received 8064 broadcasts (0 multicast)
  0 runts, 0 giants, 0 throttles
  0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
  0 watchdog, 8063 multicast, 0 pause input
  0 input packets with dribble condition detected
  9641 packets output, 840743 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.fab8.2892 (bia
0015.fab8.2892)
  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 00:00:01, 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, 2 packets/sec
5 minute output rate 0 bits/sec, 0 packets/sec
  9497 packets input, 821591 bytes, 0 no buffer
  Received 7319 broadcasts (0 multicast)
  0 runts, 0 giants, 0 throttles
  0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
  0 watchdog, 7304 multicast, 0 pause input
  0 input packets with dribble condition detected
  9521 packets output, 836592 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
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	5	0
0						
Fa0/17	0	0	0	0	5	0
0						
Fa0/18	0	0	0	0	5	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
DSW1 0/18	Fas 0/18	162	R S I	Cisco WS-CFas	
DSW1 0/16	Fas 0/16	162	R S I	Cisco WS-CFas	
DSW1 0/17	Fas 0/17	162	R S I	Cisco WS-CFas	
DSW2 0/18	Fas 0/21	176	R S I	Cisco WS-CFas	
DSW2 0/16	Fas 0/19	176	R S I	Cisco WS-CFas	

DSW2 Fas 0/20 176 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 : 155 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=00000000FFFFFFFFF0102250E0000000000000000DBDE36E00FF0000
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 : 155 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=00000000FFFFFFFFF0102250E0000000000000000DBDE36E00FF0000
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 : 153 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=00000000FFFFFFFFF0102250E0000000000000000DBDE36E00FF0000
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: FastEthernet0/21, Port ID (outgoing port): FastEthernet0/18
Holdtime : 167 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=00000000FFFFFFFFF010225180000000000000000BFD20BA00FF0000
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: FastEthernet0/19, Port ID (outgoing port): FastEthernet0/16
Holdtime : 166 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=00000000FFFFFFFFF010225180000000000000000BFD20BA00FF0000
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 : 165 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=00000000FFFFFFFFF010225180000000000000000BFD20BA00FF0000
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 unreachable 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
-----	----	---	-----	-----	-----

Pol	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
-----	----	---	-----	-----	-----

Pol	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	10/100BaseTX	disabled	20	auto	auto	
Fa0/2	10/100BaseTX	disabled	20	auto	auto	
Fa0/3	10/100BaseTX	disabled	20	auto	auto	
Fa0/4	10/100BaseTX	disabled	20	auto	auto	
Fa0/5	10/100BaseTX	disabled	20	auto	auto	
Fa0/6	10/100BaseTX	disabled	20	auto	auto	
Fa0/7	10/100BaseTX	disabled	20	auto	auto	

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:

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

Partner's information:

Group	Partner Name	Partner Device ID	Partner Port	Partner Age	Partner Flags
Fa0/19	DSW2	000b.fd20.ba00	Fa0/16	6s	SC

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

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:

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

Partner's information:

Group	Partner	Partner	Partner	Partner
Port	Name	Device ID	Port	Age
Cap.				Flags
Fa0/20	DSW2	000b.fd20.ba00	Fa0/17	25s SC
180001				

Age of the port in the current state: 0d:02h:07m:08s

Port: Fa0/21

Port state = Up Mstr In-Bndl
Channel group = 1 Mode = Desirable-S1 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:

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

Partner's information:

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

Fa0/21 DSW2 000b.fd20.ba00 Fa0/18 5s SC
180001

Age of the port in the current state: 0d:02h:07m:10s

Port-channels in the group:

Port-channel: Po1

Age of the Port-channel = 0d:02h:09m:31s
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-S1	0
0	00	Fa0/20	Desirable-S1	0
0	00	Fa0/21	Desirable-S1	0

Time since last port bundled: 0d:02h:07m:11s Fa0/21

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-S1 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:

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

Partner's information:

Group	Partner	Partner	Partner	Partner
Port	Name	Device ID	Port	Age Flags
Cap.				
Fa0/16	DSW1	000d.bde3.6e00	Fa0/16	11s SAC
E0001				

Age of the port in the current state: 0d:01h:09m:26s

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:

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

Partner's information:

Group	Partner	Partner	Partner	Partner
Port	Name	Device ID	Port	Age Flags
Cap.				
Fa0/17	DSW1	000d.bde3.6e00	Fa0/17	21s SAC
E0001				

Age of the port in the current state: 0d:01h:09m:28s

Port: Fa0/18

Port state = Up Mstr In-Bndl
Channel group = 2 Mode = Desirable-S1 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:

Group	Port	Flags	State	Timers	Interval	Count	Priority	Method	
	Fa0/18	SC	U6/S7	H	30s	1	128	Any	28

Partner's information:

Group	Partner	Partner	Partner	Partner
Port	Name	Device ID	Port	Age
Cap.				Flags
Fa0/18	DSW1	000d.bde3.6e00	Fa0/18	9s
E0001				SAC

Age of the port in the current state: 0d:01h:09m:29s

Port-channels in the group:

Port-channel: Po2

Age of the Port-channel = 0d:02h:09m:36s
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-S1	0
0	00	Fa0/17	Desirable-S1	0
0	00	Fa0/18	Desirable-S1	0

```
Time since last port bundled:    0d:01h:09m:30s    Fa0/18
Time since last port Un-bundled: 0d:01h:11m:42s    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 (P)	Fa0/17 (Pd)	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:

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

Partner's information:

Group	Partner Name	Partner Device ID	Partner Port	Partner Age	Partner Flags
Fa0/19	DSW2	000b.fd20.ba00	Fa0/16	5s	SC
180001					

Age of the port in the current state: 0d:02h:08m:00s

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:

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

Partner's information:

Group	Partner	Partner	Partner	Partner
Port	Name	Device ID	Port	Age
Cap.				Flags
Fa0/20	DSW2	000b.fd20.ba00	Fa0/17	21s
180001				SC

Age of the port in the current state: 0d:02h:08m:01s

Port: Fa0/21

Port state = Up Mstr In-Bndl
Channel group = 1 Mode = Desirable-S1 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:

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

Partner's information:

Group	Partner	Partner	Partner	Partner
Port	Name	Device ID	Port	Age
Cap.				Flags
Fa0/21	DSW2	000b.fd20.ba00	Fa0/18	2s
180001				SC

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

Group: 2

Ports in the group:

Port: Fa0/16

Port state = Up Mstr In-Bndl
Channel group = 2 Mode = Desirable-S1 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:

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

Partner's information:

Group	Partner Name	Partner Device ID	Partner Port	Partner Age	Partner Flags
Fa0/16 E0001	DSW1	000d.bde3.6e00	Fa0/16	9s	SAC

Age of the port in the current state: 0d:01h:10m:18s

Port: Fa0/17

Port state = Up Mstr In-Bndl
Channel group = 2 Mode = Desirable-S1 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:

Group	Port	Flags	State	Timers	Interval	Count	Priority	Learning Method
	Fa0/17	SC	U6/S7	H	30s	1	128	Any 28

Partner's information:

Group	Partner	Partner	Partner	Partner
Port	Name	Device ID	Port	Age
Fa0/17	DSW1	000d.bde3.6e00	Fa0/17	14s
E0001				SAC

Age of the port in the current state: 0d:01h:10m:20s

Port: Fa0/18

Port state = Up Mstr In-Bndl
 Channel group = 2 Mode = Desirable-S1 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:

Group	Port	Flags	State	Timers	Interval	Count	Priority	Learning Method
	Fa0/18	SC	U6/S7	H	30s	1	128	Any 28

Partner's information:

Group	Partner	Partner	Partner	Partner
Port	Name	Device ID	Port	Age
Cap.				Flags
Fa0/18	DSW1	000d.bde3.6e00	Fa0/18	2s
E0001				SAC

Age of the port in the current state: 0d:01h:10m:21s

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:39s
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-S1	0
0	00	Fa0/20	Desirable-S1	0
0	00	Fa0/21	Desirable-S1	0

Time since last port bundled: 0d:02h:08m:20s Fa0/21

Group: 2

Port-channels in the group:

Port-channel: Po2

Age of the Port-channel = 0d:02h:10m:40s
 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-S1	0
0	00	Fa0/17	Desirable-S1	0
0	00	Fa0/18	Desirable-S1	0

Time since last port bundled: 0d:01h:10m:34s Fa0/18

Time since last port Un-bundled: 0d:01h:12m:47s 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

Group	Partner	Partner	Partner	Partner
Port	Name	Device ID	Port	Age Flags
Fa0/19	DSW2	000b.fd20.ba00	Fa0/16	3s SC
180001				
Fa0/20	DSW2	000b.fd20.ba00	Fa0/17	21s SC
180001				
Fa0/21	DSW2	000b.fd20.ba00	Fa0/18	1s SC
180001				

Channel group 2 neighbors

Group	Partner	Partner	Partner	Partner
Port	Name	Device ID	Port	Age Flags
Fa0/16	DSW1	000d.bde3.6e00	Fa0/16	3s SAC
E0001				
Fa0/17	DSW1	000d.bde3.6e00	Fa0/17	10s SAC
E0001				
Fa0/18	DSW1	000d.bde3.6e00	Fa0/18	24s 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#
```