

```
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 down down	unassigned	YES	unset	administratively
FastEthernet0/11 down down	unassigned	YES	unset	administratively
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#

ASW2#show processes cpu

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

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





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

ASW2#show interfaces

Vlan1 is administratively down, line protocol is down

Hardware is CPU Interface, address is 0015.fab8.2880 (bia 0015.fab8.2880)

MTU 1500 bytes, BW 1000000 Kbit, DLY 10 usec,  
reliability 255/255, txload 1/255, rxload 1/255

Encapsulation ARPA, loopback not set

ARP type: ARPA, ARP Timeout 04:00:00

Last input never, output never, output hang never

Last clearing of "show interface" counters never

Input queue: 0/75/0/0 (size/max/drops/flushes); Total output drops: 0

Queueing strategy: fifo

Output queue: 0/40 (size/max)

5 minute input rate 0 bits/sec, 0 packets/sec

5 minute output rate 0 bits/sec, 0 packets/sec

0 packets input, 0 bytes, 0 no buffer

Received 0 broadcasts (0 IP multicast)

0 runts, 0 giants, 0 throttles

0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored

0 packets output, 0 bytes, 0 underruns

0 output errors, 3 interface resets

0 output buffer failures, 0 output buffers swapped out

Vlan200 is up, line protocol is up

Hardware is CPU Interface, address is 0015.fab8.2880 (bia 0015.fab8.2880)

Internet address is 192.168.1.132/27

MTU 1500 bytes, BW 1000000 Kbit, DLY 10 usec,  
reliability 255/255, txload 1/255, rxload 1/255

Encapsulation ARPA, loopback not set

ARP type: ARPA, ARP Timeout 04:00:00

Last input 02:03:23, output never, output hang never

Last clearing of "show interface" counters never  
Input queue: 0/75/0/0 (size/max/drops/flushes); Total output drops: 0  
Queueing strategy: fifo  
Output queue: 0/40 (size/max)  
5 minute input rate 1000 bits/sec, 1 packets/sec  
5 minute output rate 10000 bits/sec, 2 packets/sec  
15289 packets input, 1295238 bytes, 0 no buffer  
Received 2 broadcasts (0 IP multicast)  
0 runts, 0 giants, 0 throttles  
0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored  
16650 packets output, 10087614 bytes, 0 underruns  
0 output errors, 2 interface resets  
0 output buffer failures, 0 output buffers swapped out  
FastEthernet0/1 is administratively down, line protocol is down  
(disabled)

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

Hardware is Fast Ethernet, address is 0015.fab8.2882 (bia  
0015.fab8.2882)  
MTU 1500 bytes, BW 100000 Kbit, DLY 100 usec,  
reliability 255/255, txload 1/255, rxload 1/255  
Encapsulation ARPA, loopback not set  
Keepalive set (10 sec)  
Auto-duplex, Auto-speed, media type is 100BaseTX  
input flow-control is unsupported output flow-control is unsupported  
ARP type: ARPA, ARP Timeout 04:00:00  
Last input never, output 02:06:19, output hang never

Last clearing of "show interface" counters never  
Input queue: 0/75/0/0 (size/max/drops/flushes); Total output drops: 0  
Queueing strategy: fifo  
Output queue: 0/40 (size/max)  
5 minute input rate 0 bits/sec, 0 packets/sec  
5 minute output rate 0 bits/sec, 0 packets/sec  
1 packets input, 64 bytes, 0 no buffer  
Received 0 broadcasts (0 multicast)  
0 runts, 0 giants, 0 throttles  
0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored  
0 watchdog, 0 multicast, 0 pause input  
0 input packets with dribble condition detected  
1 packets output, 64 bytes, 0 underruns  
0 output errors, 0 collisions, 2 interface resets  
0 babbles, 0 late collision, 0 deferred  
0 lost carrier, 0 no carrier, 0 PAUSE output  
0 output buffer failures, 0 output buffers swapped out  
FastEthernet0/3 is administratively down, line protocol is down  
(disabled)

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

Hardware is Fast Ethernet, address is 0015.fab8.2884 (bia  
0015.fab8.2884)  
MTU 1500 bytes, BW 100000 Kbit, DLY 100 usec,  
reliability 255/255, txload 1/255, rxload 1/255  
Encapsulation ARPA, loopback not set  
Keepalive set (10 sec)

Auto-duplex, Auto-speed, media type is 100BaseTX  
input flow-control is unsupported output flow-control is unsupported  
ARP type: ARPA, ARP Timeout 04:00:00  
Last input never, output 02:06:22, output hang never  
Last clearing of "show interface" counters never  
Input queue: 0/75/0/0 (size/max/drops/flushes); Total output drops: 0  
Queueing strategy: fifo  
Output queue: 0/40 (size/max)  
5 minute input rate 0 bits/sec, 0 packets/sec  
5 minute output rate 0 bits/sec, 0 packets/sec  
1 packets input, 64 bytes, 0 no buffer  
Received 0 broadcasts (0 multicast)  
0 runts, 0 giants, 0 throttles  
0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored  
0 watchdog, 0 multicast, 0 pause input  
0 input packets with dribble condition detected  
1 packets output, 64 bytes, 0 underruns  
0 output errors, 0 collisions, 2 interface resets  
0 babbles, 0 late collision, 0 deferred  
0 lost carrier, 0 no carrier, 0 PAUSE output  
0 output buffer failures, 0 output buffers swapped out  
FastEthernet0/5 is administratively down, line protocol is down  
(disabled)

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

Hardware is Fast Ethernet, address is 0015.fab8.2886 (bia  
0015.fab8.2886)

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

Hardware is Fast Ethernet, address is 0015.fab8.2887 (bia  
0015.fab8.2887)

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

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

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

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



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

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

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

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

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

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

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

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

ASW2#



```
ASW2#show interfaces counters errors
```

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

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

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

Fa0/18	0	0	0	0	1	0
0						
Fa0/19	0	0	0	0	2	0
0						
Fa0/20	0	0	0	0	2	0
0						
Fa0/21	0	0	0	0	2	0
0						
Fa0/22	0	0	0	0	0	0
0						
Fa0/23	0	0	0	0	1	0
0						
Fa0/24	0	0	0	0	1	0
0						
Po1	0	0	0	0	0	0
0						
Po2	0	0	0	0	0	0
0						
ASW2#						

```
ASW2#show cdp neighbors
```

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

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

```
ASW2#
```

```
ASW2#show cdp neighbors detail
```

```
-----
```

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

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

```
advertisement version: 2  
Protocol Hello: OUI=0x00000C, Protocol ID=0x0112; payload len=27,  
value=00000000FFFFFFFF0102250E0000000000000000DBDE36E00FF0000  
VTP Management Domain: 'netlearning'  
Native VLAN: 1  
Duplex: full  
Management address(es):  
  IP address: 10.2.1.1
```

```
-----
```

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

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

```
advertisement version: 2  
Protocol Hello: OUI=0x00000C, Protocol ID=0x0112; payload len=27,  
value=00000000FFFFFFFF0102250E0000000000000000DBDE36E00FF0000  
VTP Management Domain: 'netlearning'
```

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

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

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

advertisement version: 2  
Protocol Hello: OUI=0x00000C, Protocol ID=0x0112; payload len=27,  
value=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: FastEthernet0/19, Port ID (outgoing port): FastEthernet0/16  
Holdtime : 121 sec

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

advertisement version: 2  
Protocol Hello: OUI=0x00000C, Protocol ID=0x0112; payload len=27,  
value=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: FastEthernet0/21, Port ID (outgoing port): FastEthernet0/18  
Holdtime : 119 sec

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

advertisement version: 2  
Protocol Hello: OUI=0x00000C, Protocol ID=0x0112; payload len=27,  
value=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 : 119 sec

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

advertisement version: 2  
Protocol Hello: OUI=0x00000C, Protocol ID=0x0112; payload len=27,  
value=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
-----	-----	-----	-----	-----	-----
-----					
Po1	Root	FWD	9	128.65	P2p
Po2	Desg	FWD	9	128.66	P2p

VLAN0200

Spanning tree enabled protocol ieee

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

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

Aging Time 300

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

ASW2#

ASW2#show interfaces status

Port	Name	Status	Vlan	Duplex	Speed	Type
------	------	--------	------	--------	-------	------



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

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

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

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

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

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

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

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

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

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

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

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

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

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

Name: Fa0/11

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

Name: Fa0/12

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

Name: Fa0/13

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

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

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

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



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

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

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

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

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

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

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

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

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

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

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

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

Protected: false  
Appliance trust: none

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

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

```
ASW2#show interfaces trunk
```

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

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

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

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

```
ASW2#
```

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

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



```
ASW2#show etherchannel detail
```

```
Channel-group listing:
```

```
-----
```

```
Group: 1
```

```
-----
```

```
Group state = L2
```

```
Ports: 3 Maxports = 8
```

```
Port-channels: 1 Max Port-channels = 1
```

```
Protocol: PAgP
```

```
Ports in the group:
```

```
-----
```

```
Port: Fa0/19
```

```
-----
```

```
Port state = Up Mstr In-Bndl
```

```
Channel group = 1 Mode = Desirable-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	
	Fa0/19	SC	U6/S7	H	30s	1	128	Any	27

Partner's information:

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

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

Port: Fa0/20

-----

Port state        = Up Mstr In-Bndl  
 Channel group = 1                    Mode = Desirable-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	
	Fa0/20	SC	U6/S7	H	30s	1	128	Any	27

Partner's information:

Group	Partner	Partner	Partner	Partner

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

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

Port: Fa0/21  
-----

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

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

Local information:

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

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

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

Port-channel: Po1  
-----

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

Ports in the Port-channel:

Index	Load	Port	EC state	No of bits
0	00	Fa0/19	Desirable-S1	0
0	00	Fa0/20	Desirable-S1	0
0	00	Fa0/21	Desirable-S1	0

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

Group: 2

-----

Group state = L2

Ports: 3 Maxports = 8

Port-channels: 1 Max Port-channels = 1

Protocol: PAgP

Ports in the group:

-----

Port: Fa0/16

-----

Port state = Up Mstr In-Bndl

Channel group = 2 Mode = Desirable-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	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	DSW1	000d.bde3.6e00	Fa0/16	24s SAC
	E0001				

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

Port: Fa0/17

-----

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

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

Local information:

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

Partner's information:

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

E0001

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

Port: Fa0/18

-----

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

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

Local information:

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	Flags
Fa0/18	DSW1	000d.bde3.6e00	Fa0/18	16s	SAC
E0001					

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

Port-channels in the group:

-----

Port-channel: Po2

-----

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

Ports in the Port-channel:

Index	Load	Port	EC state	No of bits
0	00	Fa0/16	Desirable-S1	0
0	00	Fa0/17	Desirable-S1	0
0	00	Fa0/18	Desirable-S1	0

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

ASW2#

```
ASW2#show spanning-tree inconsistentports
```

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

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

```
ASW2#
```

```
ASW2#show spanning-tree summary
```

```
Switch is in pvst mode
```

```
Root bridge for: none
```

```
EtherChannel misconfig guard is enabled
```

```
Extended system ID is enabled
```

```
Portfast Default is disabled
```

```
PortFast BPDU Guard Default is disabled
```

```
Portfast BPDU Filter Default is disabled
```

```
Loopguard Default is disabled
```

```
UplinkFast is disabled
```

```
BackboneFast is disabled
```

```
Pathcost method used is short
```

Name	Blocking	Listening	Learning	Forwarding	STP Active
VLAN0020	0	0	0	2	2
VLAN0200	0	0	0	2	2
2 vlans	0	0	0	4	4

```
ASW2#
```



```
ASW2#show uddl
```

```
Interface Fa0/1
```

```
---
```

```
Port enable administrative configuration setting: Disabled
```

```
Port enable operational state: Disabled
```

```
Current bidirectional state: Unknown
```

```
Interface Fa0/2
```

```
---
```

```
Port enable administrative configuration setting: Disabled
```

```
Port enable operational state: Disabled
```

```
Current bidirectional state: Unknown
```

```
Interface Fa0/3
```

```
---
```

```
Port enable administrative configuration setting: Disabled
```

```
Port enable operational state: Disabled
```

```
Current bidirectional state: Unknown
```

```
Interface Fa0/4
```

```
---
```

```
Port enable administrative configuration setting: Disabled
```

Port enable operational state: Disabled  
Current bidirectional state: Unknown

Interface Fa0/5

---

Port enable administrative configuration setting: Disabled  
Port enable operational state: Disabled  
Current bidirectional state: Unknown

Interface Fa0/6

---

Port enable administrative configuration setting: Disabled  
Port enable operational state: Disabled  
Current bidirectional state: Unknown

Interface Fa0/7

---

Port enable administrative configuration setting: Disabled  
Port enable operational state: Disabled  
Current bidirectional state: Unknown

Interface Fa0/8

---

Port enable administrative configuration setting: Disabled  
Port enable operational state: Disabled  
Current bidirectional state: Unknown

Interface Fa0/9

---

Port enable administrative configuration setting: Disabled  
Port enable operational state: Disabled  
Current bidirectional state: Unknown

Interface Fa0/10

---

Port enable administrative configuration setting: Disabled  
Port enable operational state: Disabled  
Current bidirectional state: Unknown

Interface Fa0/11

---

Port enable administrative configuration setting: Disabled  
Port enable operational state: Disabled  
Current bidirectional state: Unknown

Interface Fa0/12

---

Port enable administrative configuration setting: Disabled  
Port enable operational state: Disabled  
Current bidirectional state: Unknown

Interface Fa0/13

---

Port enable administrative configuration setting: Disabled

Port enable operational state: Disabled  
Current bidirectional state: Unknown

Interface Fa0/14

---

Port enable administrative configuration setting: Disabled  
Port enable operational state: Disabled  
Current bidirectional state: Unknown

Interface Fa0/15

---

Port enable administrative configuration setting: Disabled  
Port enable operational state: Disabled  
Current bidirectional state: Unknown

Interface Fa0/16

---

Port enable administrative configuration setting: Disabled  
Port enable operational state: Disabled  
Current bidirectional state: Unknown

Interface Fa0/17

---

Port enable administrative configuration setting: Disabled  
Port enable operational state: Disabled  
Current bidirectional state: Unknown

Interface Fa0/18

---

Port enable administrative configuration setting: Disabled  
Port enable operational state: Disabled  
Current bidirectional state: Unknown

Interface Fa0/19

---

Port enable administrative configuration setting: Disabled  
Port enable operational state: Disabled  
Current bidirectional state: Unknown

Interface Fa0/20

---

Port enable administrative configuration setting: Disabled  
Port enable operational state: Disabled  
Current bidirectional state: Unknown

Interface Fa0/21

---

Port enable administrative configuration setting: Disabled  
Port enable operational state: Disabled  
Current bidirectional state: Unknown

Interface Fa0/22

---

Port enable administrative configuration setting: Disabled

Port enable operational state: Disabled  
Current bidirectional state: Unknown

Interface Fa0/23

---

Port enable administrative configuration setting: Disabled  
Port enable operational state: Disabled  
Current bidirectional state: Unknown

Interface Fa0/24

---

Port enable administrative configuration setting: Disabled  
Port enable operational state: Disabled  
Current bidirectional state: Unknown  
ASW2#

ASW2#show etherchannel summary

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

Number of channel-groups in use: 2

Number of aggregators: 2

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

ASW2#

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

```
-----
```

```
Group: 1
```

```
-----
```

```
Protocol: PAgP
```

```
Group: 2
```

```
-----
```

```
Protocol: PAgP
```

```
ASW2#
```

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

```
Group: 1
-----
```

```
      Ports in the group:
      -----
```

```
Port: Fa0/19
-----
```

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

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

```
Local information:
```

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	12s	SC

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

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

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

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

Local information:

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	Flags
Fa0/20	DSW2	000b.fd20.ba00	Fa0/17	6s	SC
180001					

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

Port: Fa0/21

-----

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

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

Local information:



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

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

Group: 2

-----

Ports in the group:

-----

Port: Fa0/16

-----

Port state = Up Mstr In-Bndl  
Channel group = 2 Mode = Desirable-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	Hello Interval	Partner Count	PAgP Priority	Learning Method	
	Fa0/16	SC	U6/S7	H	30s	1	128	Any	28

Partner's information:

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

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

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

Port: Fa0/17

-----

Port state = Up Mstr In-Bndl  
Channel group = 2 Mode = Desirable-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								
Fa0/17	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	19s	SAC
E0001					

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

Port: Fa0/18

-----

Port state = Up Mstr In-Bndl  
Channel group = 2 Mode = Desirable-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	Hello Interval	Partner Count	PAgP Priority	Learning Method	
	Fa0/18	SC	U6/S7	H	30s	1	128	Any	28

Partner's information:

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

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

ASW2#

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

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

-----  
Group: 1

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

-----  
Port-channel: Po1

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

Ports in the Port-channel:

Index	Load	Port	EC state	No of bits
0	00	Fa0/19	Desirable-S1	0
0	00	Fa0/20	Desirable-S1	0
0	00	Fa0/21	Desirable-S1	0

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

-----  
Group: 2

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

-----  
Port-channel: Po2

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

Ports in the Port-channel:

Index	Load	Port	EC state	No of bits
0	00	Fa0/16	Desirable-S1	0
0	00	Fa0/17	Desirable-S1	0
0	00	Fa0/18	Desirable-S1	0

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

ASW2#

ASW2#show pagp neighbor

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

A - Device is in Auto mode. P - Device learns on physical port.

Channel group 1 neighbors

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

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

Channel group 2 neighbors

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

```
ASW2#show lacp neighbor
```

```
ASW2#
```

```
ASW2#show port-security
```

```
Secure Port  MaxSecureAddr  CurrentAddr  SecurityViolation  Security  
Action
```

```
(Count)
```

```
(Count)
```

```
(Count)
```



```
-----
```

--				
	Fa0/1	1	0	0
Shutdown				
	Fa0/2	1	0	0
Shutdown				
	Fa0/3	1	0	0
Shutdown				
	Fa0/4	1	0	0
Shutdown				
	Fa0/5	1	0	0
Shutdown				
	Fa0/6	1	0	0
Shutdown				
	Fa0/7	1	0	0
Shutdown				
	Fa0/8	1	0	0
Shutdown				
	Fa0/9	1	0	0
Shutdown				
	Fa0/10	1	0	0
Shutdown				
	Fa0/11	1	0	0
Shutdown				
	Fa0/12	1	0	0
Shutdown				
	Fa0/13	1	0	0
Shutdown				
	Fa0/14	1	0	0
Shutdown				
	Fa0/15	1	0	0
Shutdown				

```
-----
```

```
--
Total Addresses in System (excluding one mac per port)      : 0
Max Addresses limit in System (excluding one mac per port) : 1024
```

ASW2#

```
ASW2#show port-security address
      Secure Mac Address Table
```

```
-----
```

Vlan	Mac Address	Type	Ports	Remaining Age (mins)
----	-----	----	-----	-----

```
-----
```

```
Total Addresses in System (excluding one mac per port) : 0
Max Addresses limit in System (excluding one mac per port) : 1024
```

```
ASW2#
```