

```
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 down down	unassigned	YES unset	administratively
FastEthernet0/6 down down	unassigned	YES unset	administratively
FastEthernet0/7 down down	unassigned	YES unset	administratively
FastEthernet0/8 down down	unassigned	YES unset	administratively
FastEthernet0/9 down down	unassigned	YES unset	administratively
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: 2%/1%; one minute: 3%; 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	995	16	0.00%	0.00%	0.00%	0	Load Meter
3	176	39	4512	0.00%	0.00%	0.00%	0	SpanTree
Helper								
4	1348	503	2679	0.00%	0.02%	0.00%	0	Check
heaps								
5	0	2	0	0.00%	0.00%	0.00%	0	Pool
Manager								

67	0	2	0	0.00%	0.00%	0.00%	0	CSRT RAPID
TRANS								
69	1028	2276	451	0.08%	0.01%	0.00%	0	PAGP
ASW2#								

ASW2#show interfaces

Vlan1 is administratively down, line protocol is down

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

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

Encapsulation ARPA, loopback not set

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

Last input never, output never, output hang never

Last clearing of "show interface" counters never

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

Queueing strategy: fifo

Output queue: 0/40 (size/max)

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

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

0 packets input, 0 bytes, 0 no buffer

Received 0 broadcasts (0 IP multicast)

0 runts, 0 giants, 0 throttles

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

0 packets output, 0 bytes, 0 underruns

0 output errors, 3 interface resets

0 output buffer failures, 0 output buffers swapped out

Vlan200 is up, line protocol is up

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

Internet address is 192.168.1.132/27

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

Encapsulation ARPA, loopback not set

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

Last input 01:20:09, 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, 2 packets/sec

5 minute output rate 10000 bits/sec, 1 packets/sec

10020 packets input, 850396 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

11116 packets output, 6665748 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 01:23:05, output hang never
Last clearing of "show interface" counters never
Input queue: 0/75/0/0 (size/max/drops/flushes); Total output drops: 0
Queueing strategy: fifo
Output queue: 0/40 (size/max)
5 minute input rate 0 bits/sec, 0 packets/sec
5 minute output rate 0 bits/sec, 0 packets/sec
  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 01:23:07, 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
  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 01:23:08, output hang never
Last clearing of "show interface" counters never
Input queue: 0/75/0/0 (size/max/drops/flushes); Total output drops: 0
Queueing strategy: fifo
Output queue: 0/40 (size/max)
5 minute input rate 0 bits/sec, 0 packets/sec
5 minute output rate 0 bits/sec, 0 packets/sec
  1 packets input, 64 bytes, 0 no buffer
  Received 0 broadcasts (0 multicast)
  0 runts, 0 giants, 0 throttles
  0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
  0 watchdog, 0 multicast, 0 pause input
  0 input packets with dribble condition detected
  1 packets output, 64 bytes, 0 underruns
  0 output errors, 0 collisions, 2 interface resets
  0 babbles, 0 late collision, 0 deferred
  0 lost carrier, 0 no carrier, 0 PAUSE output
  0 output buffer failures, 0 output buffers swapped out
FastEthernet0/4 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 01:23:10, output hang never
Last clearing of "show interface" counters never
Input queue: 0/75/0/0 (size/max/drops/flushes); Total output drops: 0
Queueing strategy: fifo
Output queue: 0/40 (size/max)
5 minute input rate 0 bits/sec, 0 packets/sec
5 minute output rate 0 bits/sec, 0 packets/sec
  1 packets input, 64 bytes, 0 no buffer
  Received 0 broadcasts (0 multicast)
  0 runts, 0 giants, 0 throttles
  0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
  0 watchdog, 0 multicast, 0 pause input
  0 input packets with dribble condition detected
  1 packets output, 64 bytes, 0 underruns
  0 output errors, 0 collisions, 2 interface resets
  0 babbles, 0 late collision, 0 deferred
  0 lost carrier, 0 no carrier, 0 PAUSE output
  0 output buffer failures, 0 output buffers swapped out
```

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 01:23:11, 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 01:23:13, 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 01:23:14, 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 01:23:16, 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 01:23:18, 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 01:23:19, 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
FastEthernet0/11 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 01:23:21, 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
FastEthernet0/12 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 01:23:23, 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 01:23:24, 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
FastEthernet0/14 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 01:23:26, 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
FastEthernet0/15 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 01:23:27, 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
FastEthernet0/16 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 00:00:12, output 00:00:03, output hang never
Last clearing of "show interface" counters never
Input queue: 0/75/0/0 (size/max/drops/flushes); Total output drops: 0
Queueing strategy: fifo
Output queue: 0/40 (size/max)
5 minute input rate 0 bits/sec, 0 packets/sec
5 minute output rate 0 bits/sec, 0 packets/sec
  4706 packets input, 377632 bytes, 0 no buffer
  Received 4173 broadcasts (0 multicast)
  0 runts, 0 giants, 0 throttles
  0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
  0 watchdog, 4169 multicast, 0 pause input
  0 input packets with dribble condition detected
  1004 packets output, 102126 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 00:00:13, 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
    925 packets input, 90958 bytes, 0 no buffer
    Received 433 broadcasts (0 multicast)
    0 runts, 0 giants, 0 throttles
    0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
    0 watchdog, 432 multicast, 0 pause input
    0 input packets with dribble condition detected
    1006 packets output, 102280 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 00:00:01, 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
  925 packets input, 90944 bytes, 0 no buffer
  Received 432 broadcasts (0 multicast)
  0 runts, 0 giants, 0 throttles
  0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
  0 watchdog, 432 multicast, 0 pause input
  0 input packets with dribble condition detected
  4839 packets output, 393407 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 00:00:09, output 00:00:08, output hang never
Last clearing of "show interface" counters never
Input queue: 0/75/0/0 (size/max/drops/flushes); Total output drops: 0
Queueing strategy: fifo
Output queue: 0/40 (size/max)
5 minute input rate 0 bits/sec, 0 packets/sec
5 minute output rate 0 bits/sec, 0 packets/sec
  2287 packets input, 205091 bytes, 0 no buffer
  Received 1740 broadcasts (0 multicast)
  0 runts, 0 giants, 0 throttles
  0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
  0 watchdog, 1739 multicast, 0 pause input
  0 input packets with dribble condition detected
  4783 packets output, 388993 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 00:00:10, 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
  931 packets input, 93580 bytes, 0 no buffer
  Received 432 broadcasts (0 multicast)
  0 runts, 0 giants, 0 throttles
  0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
  0 watchdog, 432 multicast, 0 pause input
  0 input packets with dribble condition detected
  1060 packets output, 106419 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 00:00:12, 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
  3358 packets input, 267832 bytes, 0 no buffer
  Received 2869 broadcasts (0 multicast)
  0 runts, 0 giants, 0 throttles
  0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
  0 watchdog, 2869 multicast, 0 pause input
  0 input packets with dribble condition detected
  1058 packets output, 106239 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 01:23:38, 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

FastEthernet0/23 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 01:23:40, 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
FastEthernet0/24 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 01:23:41, 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.fab8.2893 (bia
0015.fab8.2893)
  MTU 1500 bytes, BW 300000 Kbit, DLY 1000 usec,
    reliability 255/255, txload 1/255, rxload 1/255
  Encapsulation ARPA, loopback not set
  Full-duplex, 100Mb/s, media type is unknown media type
  input flow-control is off, output flow-control is off
  Members in this channel: Fa0/19 Fa0/20 Fa0/21
  ARP type: ARPA, ARP Timeout 04:00:00
  Last input 00:00:01, output 00:00:01, output hang never
  Last clearing of "show interface" counters never
  Input queue: 0/75/0/0 (size/max/drops/flushes); Total output drops: 0
  Queueing strategy: fifo
  Output queue: 0/40 (size/max)
  5 minute input rate 0 bits/sec, 0 packets/sec
  5 minute output rate 0 bits/sec, 0 packets/sec
    6565 packets input, 565827 bytes, 0 no buffer
  Received 5033 broadcasts (0 multicast)
    0 runts, 0 giants, 0 throttles
    0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
    0 watchdog, 5031 multicast, 0 pause input
    0 input packets with dribble condition detected
```



```
6475 packets output, 561312 bytes, 0 underruns
0 output errors, 0 collisions, 1 interface resets
0 babbles, 0 late collision, 0 deferred
0 lost carrier, 0 no carrier, 0 PAUSE output
0 output buffer failures, 0 output buffers swapped out
Port-channel2 is up, line protocol is up (connected)
Hardware is EtherChannel, address is 0015.fab8.2892 (bia
0015.fab8.2892)
MTU 1500 bytes, BW 300000 Kbit, DLY 1000 usec,
  reliability 255/255, txload 1/255, rxload 1/255
Encapsulation ARPA, loopback not set
Full-duplex, 100Mb/s, media type is unknown media type
input flow-control is off, output flow-control is off
Members in this channel: Fa0/16 Fa0/17 Fa0/18
ARP type: ARPA, ARP Timeout 04:00:00
Last input 00:00:00, 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
  6567 packets input, 561356 bytes, 0 no buffer
  Received 5046 broadcasts (0 multicast)
  0 runts, 0 giants, 0 throttles
  0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
  0 watchdog, 5042 multicast, 0 pause input
  0 input packets with dribble condition detected
  6610 packets output, 572522 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 0/16	Fas 0/16	157	R S I	Cisco WS-CFas	
DSW1 0/17	Fas 0/17	157	R S I	Cisco WS-CFas	
DSW1 0/18	Fas 0/18	157	R S I	Cisco WS-CFas	
DSW2 0/18	Fas 0/21	146	R S I	Cisco WS-CFas	
DSW2 0/17	Fas 0/20	145	R S I	Cisco WS-CFas	
DSW2 0/16	Fas 0/19	145	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: FastEthernet0/16, Port ID (outgoing port): FastEthernet0/16  
Holdtime : 151 sec
```

```
Version :
```

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

```
advertisement version: 2  
Protocol Hello: OUI=0x00000C, Protocol ID=0x0112; payload len=27,  
value=00000000FFFFFFFFF0102250E0000000000000000DBDE36E00FF0000  
VTP Management Domain: 'netlearning'  
Native VLAN: 1  
Duplex: full  
Management address(es):  
  IP address: 10.2.1.1
```

```
-----
```

```
Device ID: DSW1  
Entry address(es):  
  IP address: 10.2.1.1  
Platform: Cisco WS-C3550-24, Capabilities: Router Switch IGMP  
Interface: FastEthernet0/17, Port ID (outgoing port): FastEthernet0/17  
Holdtime : 150 sec
```

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

advertisement version: 2
Protocol Hello: OUI=0x00000C, Protocol ID=0x0112; payload len=27,
value=00000000FFFFFFFFF0102250E0000000000000000DBDE36E00FF0000
VTP Management Domain: 'netlearning'
Native VLAN: 1
Duplex: full
Management address(es):
IP address: 10.2.1.1

Device ID: DSW1
Entry address(es):
IP address: 10.2.1.1
Platform: Cisco WS-C3550-24, Capabilities: Router Switch IGMP
Interface: FastEthernet0/18, Port ID (outgoing port): FastEthernet0/18
Holdtime : 149 sec

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

advertisement version: 2
Protocol Hello: OUI=0x00000C, Protocol ID=0x0112; payload len=27,
value=00000000FFFFFFFFF0102250E0000000000000000DBDE36E00FF0000
VTP Management Domain: 'netlearning'
Native VLAN: 1
Duplex: full
Management address(es):
IP address: 10.2.1.1

Device ID: DSW2
Entry address(es):
IP address: 10.2.1.2
Platform: Cisco WS-C3550-24-PWR, Capabilities: Router Switch IGMP
Interface: FastEthernet0/21, Port ID (outgoing port): FastEthernet0/18
Holdtime : 137 sec

Version :
Cisco IOS Software, C3550 Software (C3550-IPSERVICESK9-M), Version
12.2(44)SE6, RELEASE SOFTWARE (fc1)
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Compiled Mon 09-Mar-09 20:28 by gereddy

advertisement version: 2

Protocol Hello: OUI=0x00000C, Protocol ID=0x0112; payload len=27,
value=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 : 136 sec

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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 : 135 sec

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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	10/100BaseTX	disabled	20	auto	auto	
Fa0/2	10/100BaseTX	disabled	20	auto	auto	
Fa0/3	10/100BaseTX	disabled	20	auto	auto	
Fa0/4	10/100BaseTX	disabled	20	auto	auto	
Fa0/5	10/100BaseTX	disabled	20	auto	auto	
Fa0/6	10/100BaseTX	disabled	20	auto	auto	
Fa0/7	10/100BaseTX	disabled	20	auto	auto	
Fa0/8	10/100BaseTX	disabled	20	auto	auto	

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
ASW2#

20,200

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

```
Group: 1
-----
Group state = L2
Ports: 3    Maxports = 8
Port-channels: 1 Max Port-channels = 1
Protocol:   PAgP
```

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

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

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

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

```
Local information:
```

Group	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	Partner	Partner	Partner	Partner

Port Cap.	Name	Device ID	Port	Age	Flags
Fa0/19 180001	DSW2	000b.fd20.ba00	Fa0/16	0s	SC

Age of the port in the current state: 0d:01h:23m:49s

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	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 Name	Partner Device ID	Partner Port	Partner Age	Partner Flags
Fa0/20 180001	DSW2	000b.fd20.ba00	Fa0/17	0s	SC

Age of the port in the current state: 0d:01h:23m:50s

Port: Fa0/21

Port state = Up Mstr In-Bndl
Channel group = 1 Mode = Desirable-S1 Gcchange = 0
Port-channel = Po1 GC = 0x00010001 Pseudo port-channel = Po1
Port index = 0 Load = 0x00 Protocol = PAgP

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

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

Local information:

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

Partner's information:

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

Age of the port in the current state: 0d:01h:23m:51s

Port-channels in the group:

Port-channel: Po1

Age of the Port-channel = 0d:01h:26m:12s
 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:01h:23m:52s Fa0/21

Group: 2

Group state = L2
 Ports: 3 Maxports = 8
 Port-channels: 1 Max Port-channels = 1
 Protocol: PAgP

Ports in the group:

Port: Fa0/16

Port state = Up Mstr In-Bndl
Channel group = 2 Mode = Desirable-S1 Gcchange = 0
Port-channel = Po2 GC = 0x00020001 Pseudo port-channel =
Po2
Port index = 0 Load = 0x00 Protocol = PAgP

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

Local information:

Group	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	18s	SAC

Age of the port in the current state: 0d:01h:24m: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	Port	Flags	State	Timers	Interval	Count	Priority	Method	
	Fa0/17	SC	U6/S7	H	30s	1	128	Any	28

Partner's information:

Group	Partner	Partner	Partner	Partner	
Port	Name	Device ID	Port	Age	Flags
Fa0/17	DSW1	000d.bde3.6e00	Fa0/17	12s	SAC
E0001					

Age of the port in the current state: 0d:01h:24m:44s

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	23s	SAC
E0001					

Age of the port in the current state: 0d:01h:24m:45s

Port-channels in the group:

Port-channel: Po2

Age of the Port-channel = 0d:01h:26m:17s
Logical slot/port = 1/1 Number of ports = 3
GC = 0x00020001 HotStandBy port = null
Port state = Port-channel Ag-Inuse
Protocol = PAgP

Ports in the Port-channel:

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

Time since last port bundled: 0d:01h:24m:46s Fa0/16

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

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

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

```
ASW2#
```

ASW2#show spanning-tree summary

Switch is in pvst mode

Root bridge for: none

EtherChannel misconfig guard is enabled

Extended system ID is enabled

Portfast Default is disabled

PortFast BPDU Guard Default is disabled

Portfast BPDU Filter Default is disabled

Loopguard Default is disabled

UplinkFast is disabled

BackboneFast is disabled

Pathcost method used is short

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

ASW2#

```
ASW2#show udld
```

```
Interface Fa0/1
```

```
---
```

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

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

```
Current bidirectional state: Unknown
```

```
Interface Fa0/2
```

```
---
```

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

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

Current bidirectional state: Unknown

Interface Fa0/3

Port enable administrative configuration setting: Disabled

Port enable operational state: Disabled

Current bidirectional state: Unknown

Interface Fa0/4

Port enable administrative configuration setting: Disabled

Port enable operational state: Disabled

Current bidirectional state: Unknown

Interface Fa0/5

Port enable administrative configuration setting: Disabled

Port enable operational state: Disabled

Current bidirectional state: Unknown

Interface Fa0/6

Port enable administrative configuration setting: Disabled

Port enable operational state: Disabled

Current bidirectional state: Unknown

Interface Fa0/7

Port enable administrative configuration setting: Disabled

Port enable operational state: Disabled

Current bidirectional state: Unknown

Interface Fa0/8

Port enable administrative configuration setting: Disabled

Port enable operational state: Disabled

Current bidirectional state: Unknown

Interface Fa0/9

Port enable administrative configuration setting: Disabled

Port enable operational state: Disabled

Current bidirectional state: Unknown

Interface Fa0/10

Port enable administrative configuration setting: Disabled

Port enable operational state: Disabled

Current bidirectional state: Unknown

Interface Fa0/11

Port enable administrative configuration setting: Disabled

Port enable operational state: Disabled

Current bidirectional state: Unknown

Interface Fa0/12

Port enable administrative configuration setting: Disabled

Port enable operational state: Disabled

Current bidirectional state: Unknown

Interface Fa0/13

Port enable administrative configuration setting: Disabled

Port enable operational state: Disabled

Current bidirectional state: Unknown

Interface Fa0/14

Port enable administrative configuration setting: Disabled

Port enable operational state: Disabled

Current bidirectional state: Unknown

Interface Fa0/15

Port enable administrative configuration setting: Disabled

Port enable operational state: Disabled

Current bidirectional state: Unknown

Interface Fa0/16

Port enable administrative configuration setting: Disabled

Port enable operational state: Disabled

Current bidirectional state: Unknown

Interface Fa0/17

Port enable administrative configuration setting: Disabled

Port enable operational state: Disabled

Current bidirectional state: Unknown

Interface Fa0/18

Port enable administrative configuration setting: Disabled

Port enable operational state: Disabled

Current bidirectional state: Unknown

Interface Fa0/19

Port enable administrative configuration setting: Disabled

Port enable operational state: Disabled

Current bidirectional state: Unknown

Interface Fa0/20

Port enable administrative configuration setting: Disabled

Port enable operational state: Disabled

Current bidirectional state: Unknown

Interface Fa0/21

Port enable administrative configuration setting: Disabled

Port enable operational state: Disabled

Current bidirectional state: Unknown

Interface Fa0/22

Port enable administrative configuration setting: Disabled

Port enable operational state: Disabled

Current bidirectional state: Unknown

Interface Fa0/23

Port enable administrative configuration setting: Disabled

Port enable operational state: Disabled

Current bidirectional state: Unknown

Interface Fa0/24

Port enable administrative configuration setting: Disabled

Port enable operational state: Disabled

Current bidirectional state: Unknown

ASW2#

ASW2#show etherchannel summary

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

Number of channel-groups in use: 2

Number of aggregators: 2

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

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

Partner's information:

Group	Partner	Partner	Partner	Partner
Port	Name	Device ID	Port	Age Flags
Cap.				
Fa0/19	DSW2	000b.fd20.ba00	Fa0/16	6s SC
180001				

Age of the port in the current state: 0d:01h:24m:47s

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	Interval	Count	Priority	Method	
					30s	1	128	Any	27

Partner's information:

Group	Port	Partner Name	Partner Device ID	Partner Port	Partner Age	Partner Flags
		DSW2	000b.fd20.ba00	Fa0/17	3s	SC

Age of the port in the current state: 0d:01h:24m:49s

Port: Fa0/21

Port state = Up Mstr In-Bndl
Channel group = 1 Mode = Desirable-S1 Gcchange = 0
Port-channel = Po1 GC = 0x00010001 Pseudo port-channel = Po1
Port index = 0 Load = 0x00 Protocol = PAgP

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

Local information:

Group	Port	Flags	State	Timers	Interval	Count	Priority	Method	
					30s	1	128	Any	27

Partner's information:

Group	Port	Partner Name	Partner Device ID	Partner Port	Partner Age	Partner Flags
		DSW2	000b.fd20.ba00	Fa0/18	22s	SC

Age of the port in the current state: 0d:01h:24m:50s

Group: 2

Ports in the group:

Port: Fa0/16

Port state = Up Mstr In-Bndl
Channel group = 2 Mode = Desirable-S1 Gcchange = 0
Port-channel = Po2 GC = 0x00020001 Pseudo port-channel =
Po2
Port index = 0 Load = 0x00 Protocol = PAgP

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

Local information:

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

Partner's information:

Group	Partner Name	Partner Device ID	Partner Port	Partner Age	Partner Flags
Fa0/16	DSW1	000d.bde3.6e00	Fa0/16	22s	SAC

E0001

Age of the port in the current state: 0d:01h:25m:40s

Port: Fa0/17

Port state = Up Mstr In-Bndl
Channel group = 2 Mode = Desirable-S1 Gcchange = 0
Port-channel = Po2 GC = 0x00020001 Pseudo port-channel =
Po2
Port index = 0 Load = 0x00 Protocol = PAgP

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

Local information:

Group	Port	Flags	State	Timers	Hello Interval	Partner Count	PAgP Priority	Learning Method	
	Fa0/17	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
	Fa0/17	DSW1	000d.bde3.6e00	Fa0/17	12s	SAC
	E0001					

Age of the port in the current state: 0d:01h:25m:42s

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	Partner	Partner	Partner	
Port	Name	Device ID	Port	Age	Flags
Fa0/18	DSW1	000d.bde3.6e00	Fa0/18	25s	SAC
E0001					

Age of the port in the current state: 0d:01h:25m:43s

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:01h:27m:27s
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:01h:25m:07s Fa0/21

Group: 2

Port-channels in the group:

Port-channel: Po2

Age of the Port-channel = 0d:01h:27m:27s
Logical slot/port = 1/1 Number of ports = 3
GC = 0x00020001 HotStandBy port = null
Port state = Port-channel Ag-Inuse
Protocol = PAgP

Ports in the Port-channel:

Index	Load	Port	EC state	No of bits
-------	------	------	----------	------------

0	00	Fa0/16	Desirable-S1	0
0	00	Fa0/17	Desirable-S1	0
0	00	Fa0/18	Desirable-S1	0

Time since last port bundled: 0d:01h:25m:57s Fa0/16

ASW2#

ASW2#show pagp neighbor

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

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

Channel group 1 neighbors

Group	Partner	Partner	Partner	Partner
Port	Name	Device ID	Port	Age Flags
Fa0/19	DSW2	000b.fd20.ba00	Fa0/16	6s SC
180001				
Fa0/20	DSW2	000b.fd20.ba00	Fa0/17	0s SC
180001				
Fa0/21	DSW2	000b.fd20.ba00	Fa0/18	21s 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	16s SAC
E0001				
Fa0/17	DSW1	000d.bde3.6e00	Fa0/17	5s SAC
E0001				
Fa0/18	DSW1	000d.bde3.6e00	Fa0/18	16s 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#
ASW2#
```