

```
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 |
|-----------------|---------------|-----|--------|------------------|
| Vlan1 | unassigned | YES | NVRAM | administratively |
| down down | | | | |
| Vlan200 | 192.168.1.132 | YES | NVRAM | up |
| up | | | | |
| FastEthernet0/1 | unassigned | YES | unset | administratively |
| down down | | | | |
| FastEthernet0/2 | unassigned | YES | unset | administratively |
| down down | | | | |
| FastEthernet0/3 | unassigned | YES | unset | administratively |
| down down | | | | |
| FastEthernet0/4 | unassigned | YES | unset | administratively |
| down down | | | | |
| FastEthernet0/5 | unassigned | YES | unset | administratively |
| down down | | | | |
| FastEthernet0/6 | unassigned | YES | unset | administratively |
| down down | | | | |
| FastEthernet0/7 | unassigned | YES | unset | administratively |
| down down | | | | |
| FastEthernet0/8 | unassigned | YES | unset | administratively |
| down down | | | | |

| | | | | |
|-------------------------------|------------|-----|-------|------------------|
| FastEthernet0/9 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#

| | | | | | | | | |
|------------------|-------|-------|-------|-------|-------|-------|---|------------|
| 16 | 16 | 356 | 44 | 0.00% | 0.00% | 0.00% | 0 | Compute |
| load avg | | | | | | | | |
| 17 | 236 | 30 | 7866 | 0.00% | 0.00% | 0.00% | 0 | Per-minute |
| Jobs | | | | | | | | |
| 18 | 8 | 20 | 400 | 0.00% | 0.00% | 0.00% | 0 | AggMgr |
| Process | | | | | | | | |
| 19 | 0 | 2 | 0 | 0.00% | 0.00% | 0.00% | 0 | Calhoun |
| Storm Co | | | | | | | | |
| 20 | 296 | 44297 | 6 | 0.08% | 0.05% | 0.01% | 0 | Calhoun |
| LED Proc | | | | | | | | |
| 21 | 14128 | 3515 | 4019 | 0.73% | 0.76% | 0.75% | 0 | Calhoun |
| Statisti | | | | | | | | |
| 22 | 36 | 8850 | 4 | 0.00% | 0.01% | 0.00% | 0 | HMATM |
| Learn proc | | | | | | | | |
| 23 | 256 | 14 | 18285 | 0.00% | 0.00% | 0.00% | 0 | CalhounPM |
| 24 | 80 | 8856 | 9 | 0.00% | 0.01% | 0.00% | 0 | Link |
| Status Proc | | | | | | | | |
| 25 | 16 | 8859 | 1 | 0.00% | 0.00% | 0.00% | 0 | Calhoun |
| PHY Loop | | | | | | | | |
| 26 | 0 | 1 | 0 | 0.00% | 0.00% | 0.00% | 0 | |
| CalhounInsIpopti | | | | | | | | |
| 27 | 0 | 1 | 0 | 0.00% | 0.00% | 0.00% | 0 | Calhoun |
| DHCP Sno | | | | | | | | |
| 28 | 320 | 410 | 780 | 0.00% | 0.01% | 0.00% | 0 | CDP |
| Protocol | | | | | | | | |
| 29 | 0 | 15 | 0 | 0.00% | 0.00% | 0.00% | 0 | DHCP |
| Snooping | | | | | | | | |
| 30 | 0 | 30 | 0 | 0.00% | 0.00% | 0.00% | 0 | IP Input |
| 31 | 412 | 686 | 600 | 0.00% | 0.00% | 0.00% | 0 | DTP |
| Protocol | | | | | | | | |
| 32 | 8 | 180 | 44 | 0.00% | 0.00% | 0.00% | 0 | Ethchnl |
| 33 | 156 | 29 | 5379 | 0.00% | 0.00% | 0.00% | 0 | VLAN |
| Manager | | | | | | | | |
| 34 | 0 | 2 | 0 | 0.00% | 0.00% | 0.00% | 0 | PI MATM |
| Aging Pr | | | | | | | | |
| 35 | 16 | 16 | 1000 | 0.00% | 0.00% | 0.00% | 0 | VMATM |
| Callback | | | | | | | | |
| 36 | 2480 | 3526 | 703 | 0.16% | 0.07% | 0.08% | 0 | Spanning |
| Tree | | | | | | | | |
| 37 | 24 | 1774 | 13 | 0.00% | 0.00% | 0.00% | 0 | UDLD |
| 38 | 0 | 38 | 0 | 0.00% | 0.00% | 0.00% | 0 | Port- |
| Security | | | | | | | | |
| 39 | 8 | 2 | 4000 | 0.00% | 0.00% | 0.00% | 0 | DHCPD |
| Receive | | | | | | | | |
| 40 | 0 | 1 | 0 | 0.00% | 0.00% | 0.00% | 0 | HTTP Timer |
| 41 | 0 | 1 | 0 | 0.00% | 0.00% | 0.00% | 0 | RARP Input |
| 42 | 0 | 1 | 0 | 0.00% | 0.00% | 0.00% | 0 | TCP Timer |
| 43 | 0 | 1 | 0 | 0.00% | 0.00% | 0.00% | 0 | TCP |
| Protocols | | | | | | | | |
| 44 | 0 | 1 | 0 | 0.00% | 0.00% | 0.00% | 0 | Socket |
| Timers | | | | | | | | |
| 45 | 8 | 14 | 571 | 0.00% | 0.00% | 0.00% | 0 | L2MM |
| 46 | 60 | 142 | 422 | 0.00% | 0.00% | 0.00% | 0 | MRD |
| 47 | 12 | 32 | 375 | 0.00% | 0.00% | 0.00% | 0 | IGMPSN |


```
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 00:26:55, 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 10000 bits/sec, 2 packets/sec
3510 packets input, 300756 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
4285 packets output, 2446662 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 00:29:49, output hang never
Last clearing of "show interface" counters never
Input queue: 0/75/0/0 (size/max/drops/flushes); Total output drops: 0
Queueing strategy: fifo
Output queue: 0/40 (size/max)
5 minute input rate 0 bits/sec, 0 packets/sec
5 minute output rate 0 bits/sec, 0 packets/sec
1 packets input, 64 bytes, 0 no buffer
Received 0 broadcasts (0 multicast)
0 runts, 0 giants, 0 throttles
0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
0 watchdog, 0 multicast, 0 pause input
0 input packets with dribble condition detected
1 packets output, 64 bytes, 0 underruns
0 output errors, 0 collisions, 2 interface resets
0 babbles, 0 late collision, 0 deferred
0 lost carrier, 0 no carrier, 0 PAUSE output
0 output buffer failures, 0 output buffers swapped out

FastEthernet0/2 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 00:29:51, output hang never
Last clearing of "show interface" counters never
Input queue: 0/75/0/0 (size/max/drops/flushes); Total output drops: 0
Queueing strategy: fifo
Output queue: 0/40 (size/max)
5 minute input rate 0 bits/sec, 0 packets/sec
5 minute output rate 0 bits/sec, 0 packets/sec
  1 packets input, 64 bytes, 0 no buffer
  Received 0 broadcasts (0 multicast)
  0 runts, 0 giants, 0 throttles
  0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
  0 watchdog, 0 multicast, 0 pause input
  0 input packets with dribble condition detected
  1 packets output, 64 bytes, 0 underruns
  0 output errors, 0 collisions, 2 interface resets
  0 babbles, 0 late collision, 0 deferred
  0 lost carrier, 0 no carrier, 0 PAUSE output
  0 output buffer failures, 0 output buffers swapped out
FastEthernet0/3 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 00:29:53, 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 00:29:54, output hang never
Last clearing of "show interface" counters never
Input queue: 0/75/0/0 (size/max/drops/flushes); Total output drops: 0
Queueing strategy: fifo
Output queue: 0/40 (size/max)
5 minute input rate 0 bits/sec, 0 packets/sec
5 minute output rate 0 bits/sec, 0 packets/sec
1 packets input, 64 bytes, 0 no buffer
Received 0 broadcasts (0 multicast)
0 runts, 0 giants, 0 throttles
0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
0 watchdog, 0 multicast, 0 pause input
0 input packets with dribble condition detected
1 packets output, 64 bytes, 0 underruns
0 output errors, 0 collisions, 2 interface resets
0 babbles, 0 late collision, 0 deferred
0 lost carrier, 0 no carrier, 0 PAUSE output
0 output buffer failures, 0 output buffers swapped out
FastEthernet0/5 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 00:29:56, output hang never
Last clearing of "show interface" counters never
Input queue: 0/75/0/0 (size/max/drops/flushes); Total output drops: 0
Queueing strategy: fifo
Output queue: 0/40 (size/max)
5 minute input rate 0 bits/sec, 0 packets/sec
5 minute output rate 0 bits/sec, 0 packets/sec
1 packets input, 64 bytes, 0 no buffer
Received 0 broadcasts (0 multicast)
0 runts, 0 giants, 0 throttles
0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
0 watchdog, 0 multicast, 0 pause input
0 input packets with dribble condition detected
1 packets output, 64 bytes, 0 underruns
0 output errors, 0 collisions, 2 interface resets
0 babbles, 0 late collision, 0 deferred

```
    0 lost carrier, 0 no carrier, 0 PAUSE output
    0 output buffer failures, 0 output buffers swapped out
FastEthernet0/6 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 00:29:58, 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 00:29:59, 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 00:30:00, 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
  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 00:30:02, 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
  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 00:30:03, 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
    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 00:30:05, 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
FastEthernet0/12 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 00:30:07, 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
FastEthernet0/13 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 00:30:08, 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
FastEthernet0/14 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 00:30:10, 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

FastEthernet0/15 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 00:30:12, 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 00:00:07, 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
  1670 packets input, 134722 bytes, 0 no buffer
  Received 1487 broadcasts (0 multicast)
  0 runts, 0 giants, 0 throttles
  0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
  0 watchdog, 1484 multicast, 0 pause input
  0 input packets with dribble condition detected
  411 packets output, 42643 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 00:00:14, 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
  331 packets input, 32872 bytes, 0 no buffer
  Received 158 broadcasts (0 multicast)
  0 runts, 0 giants, 0 throttles
  0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
  0 watchdog, 158 multicast, 0 pause input
  0 input packets with dribble condition detected
  1717 packets output, 141672 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 00:00:16, output 00:00:00, output hang never
Last clearing of "show interface" counters never
Input queue: 0/75/0/0 (size/max/drops/flushes); Total output drops: 0
Queueing strategy: fifo
Output queue: 0/40 (size/max)
5 minute input rate 0 bits/sec, 0 packets/sec
5 minute output rate 0 bits/sec, 0 packets/sec
  333 packets input, 33030 bytes, 0 no buffer
  Received 160 broadcasts (0 multicast)
  0 runts, 0 giants, 0 throttles
  0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
  0 watchdog, 159 multicast, 0 pause input
  0 input packets with dribble condition detected
  411 packets output, 42617 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 00:00:02, 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  
    784 packets input, 70843 bytes, 0 no buffer  
    Received 604 broadcasts (0 multicast)  
    0 runts, 0 giants, 0 throttles  
    0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored  
    0 watchdog, 603 multicast, 0 pause input  
    0 input packets with dribble condition detected  
    1752 packets output, 144674 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 00:00:00, output 00:00:00, output hang never  
Last clearing of "show interface" counters never  
Input queue: 0/75/0/0 (size/max/drops/flushes); Total output drops: 0  
Queueing strategy: fifo  
Output queue: 0/40 (size/max)  
5 minute input rate 0 bits/sec, 0 packets/sec  
5 minute output rate 0 bits/sec, 0 packets/sec  
    1170 packets input, 93588 bytes, 0 no buffer  
    Received 1002 broadcasts (0 multicast)  
    0 runts, 0 giants, 0 throttles  
    0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored  
    0 watchdog, 1001 multicast, 0 pause input  
    0 input packets with dribble condition detected  
    463 packets output, 46566 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 00:00:01, 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
  324 packets input, 32686 bytes, 0 no buffer
  Received 155 broadcasts (0 multicast)
  0 runts, 0 giants, 0 throttles
  0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
  0 watchdog, 155 multicast, 0 pause input
  0 input packets with dribble condition detected
  462 packets output, 46450 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 00:30:22, output hang never
Last clearing of "show interface" counters never
Input queue: 0/75/0/0 (size/max/drops/flushes); Total output drops: 0
Queueing strategy: fifo
Output queue: 0/40 (size/max)
5 minute input rate 0 bits/sec, 0 packets/sec
5 minute output rate 0 bits/sec, 0 packets/sec
  1 packets input, 64 bytes, 0 no buffer
  Received 0 broadcasts (0 multicast)
  0 runts, 0 giants, 0 throttles
  0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
  0 watchdog, 0 multicast, 0 pause input
  0 input packets with dribble condition detected
  1 packets output, 64 bytes, 0 underruns
  0 output errors, 0 collisions, 2 interface resets
  0 babbles, 0 late collision, 0 deferred
  0 lost carrier, 0 no carrier, 0 PAUSE output
```

```
0 output buffer failures, 0 output buffers swapped out
FastEthernet0/23 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 00:30:24, 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
FastEthernet0/24 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 00:30:26, 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
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 00:00:00, 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 1000 bits/sec, 2 packets/sec
  5 minute output rate 0 bits/sec, 0 packets/sec
    2276 packets input, 198039 bytes, 0 no buffer
    Received 1758 broadcasts (0 multicast)
    0 runts, 0 giants, 0 throttles
    0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
    0 watchdog, 1757 multicast, 0 pause input
    0 input packets with dribble condition detected
    2257 packets output, 197787 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.fab8.2891 (bia
0015.fab8.2891)
  MTU 1500 bytes, BW 300000 Kbit, DLY 1000 usec,
    reliability 255/255, txload 1/255, rxload 1/255
  Encapsulation ARPA, loopback not set
  Full-duplex, 100Mb/s, media type is unknown media type
  input flow-control is off, output flow-control is off
  Members in this channel: Fa0/16 Fa0/17 Fa0/18
  ARP type: ARPA, ARP Timeout 04:00:00
  Last input 00:00:01, output 00:00:01, output hang never
  Last clearing of "show interface" counters never
  Input queue: 0/75/0/0 (size/max/drops/flushes); Total output drops: 0
  Queueing strategy: fifo
  Output queue: 0/40 (size/max)
  5 minute input rate 0 bits/sec, 0 packets/sec
  5 minute output rate 0 bits/sec, 0 packets/sec
    2339 packets input, 201130 bytes, 0 no buffer
    Received 1810 broadcasts (0 multicast)
    0 runts, 0 giants, 0 throttles
    0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
    0 watchdog, 1806 multicast, 0 pause input
    0 input packets with dribble condition detected
```



```
2306 packets output, 202059 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 | 171 | R S I | Cisco WS-CFas | |
| DSW1 0/18 | Fas 0/18 | 170 | R S I | Cisco WS-CFas | |
| DSW1 0/17 | Fas 0/17 | 170 | R S I | Cisco WS-CFas | |
| DSW2 0/17 | Fas 0/20 | 160 | R S I | Cisco WS-CFas | |
| DSW2 0/16 | Fas 0/19 | 159 | R S I | Cisco WS-CFas | |
| DSW2 0/18 | Fas 0/21 | 159 | 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 : 164 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 : 162 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 : 161 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: FastEthernet0/20, 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=00000000FFFFFFFFF010225180000000000000000BFD20BA00FF0000
VTP Management Domain: 'netlearning'
Native VLAN: 1
Duplex: full
Management address(es):
IP address: 10.2.1.2

Device ID: DSW2
Entry address(es):
IP address: 10.2.1.2
Platform: Cisco WS-C3550-24-PWR, Capabilities: Router Switch IGMP
Interface: FastEthernet0/19, Port ID (outgoing port): FastEthernet0/16
Holdtime : 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=00000000FFFFFFFFF010225180000000000000000BFD20BA00FF0000
VTP Management Domain: 'netlearning'
Native VLAN: 1
Duplex: full
Management address(es):
IP address: 10.2.1.2

Device ID: DSW2
Entry address(es):
IP address: 10.2.1.2
Platform: Cisco WS-C3550-24-PWR, Capabilities: Router Switch IGMP
Interface: FastEthernet0/21, Port ID (outgoing port): FastEthernet0/18
Holdtime : 148 sec

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

advertisement version: 2
Protocol Hello: OUI=0x00000C, Protocol ID=0x0112; payload len=27,
value=00000000FFFFFFFFF010225180000000000000000BFD20BA00FF0000
VTP Management Domain: 'netlearning'
Native VLAN: 1
Duplex: full
Management address(es):
IP address: 10.2.1.2

ASW2#

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



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

```
ASW2#show ip interface
Vlan1 is administratively down, line protocol is down
  Internet protocol processing disabled
Vlan200 is up, line protocol is up
  Internet address is 192.168.1.132/27
  Broadcast address is 255.255.255.255
  Address determined by non-volatile memory
  MTU is 1500 bytes
  Helper address is not set
  Directed broadcast forwarding is disabled
  Outgoing access list is not set
  Inbound access list is not set
  Proxy ARP is enabled
  Local Proxy ARP is disabled
  Security level is default
  Split horizon is enabled
  ICMP redirects are always sent
  ICMP unreachable are always sent
  ICMP mask replies are never sent
  IP fast switching is disabled
  IP fast switching on the same interface is disabled
  IP Null turbo vector
  IP multicast fast switching is disabled
```

```
IP multicast distributed fast switching is disabled
IP route-cache flags are None
Router Discovery is disabled
IP output packet accounting is disabled
IP access violation accounting is disabled
TCP/IP header compression is disabled
RTP/IP header compression is disabled
Probe proxy name replies are disabled
Policy routing is disabled
Network address translation is disabled
WCCP Redirect outbound is disabled
WCCP Redirect inbound is disabled
WCCP Redirect exclude is disabled
BGP Policy Mapping is disabled
ASW2#
```

```
ASW2#show tcp statistics
Rcvd: 0 Total, 0 no port
      0 checksum error, 0 bad offset, 0 too short
      0 packets (0 bytes) in sequence
      0 dup packets (0 bytes)
      0 partially dup packets (0 bytes)
      0 out-of-order packets (0 bytes)
      0 packets (0 bytes) with data after window
      0 packets after close
      0 window probe packets, 0 window update packets
      0 dup ack packets, 0 ack packets with unsend data
      0 ack packets (0 bytes)
Sent: 0 Total, 0 urgent packets
      0 control packets (including 0 retransmitted)
      0 data packets (0 bytes)
      0 data packets (0 bytes) retransmitted
      0 ack only packets (0 delayed)
      0 window probe packets, 0 window update packets
0 Connections initiated, 0 connections accepted, 0 connections
established
0 Connections closed (including 0 dropped, 0 embryonic dropped)
0 Total rxmt timeout, 0 connections dropped in rxmt timeout
0 Keepalive timeout, 0 keepalive probe, 0 Connections dropped in
keepalive
ASW2#
```

```
ASW2#show access-lists
```

```
ASW2#
```

ASW2#show vlan

| VLAN Name | Status | Ports |
|----------------------|-----------|--|
| 1 default | active | Fa0/22, Fa0/23, Fa0/24 |
| 10 VLAN0010 | active | |
| 20 VLAN0020 | active | Fa0/1, Fa0/2, Fa0/3, Fa0/4 Fa0/5, Fa0/6, Fa0/7, Fa0/8 Fa0/9, Fa0/10, Fa0/11, Fa0/12 Fa0/13, Fa0/14, Fa0/15 |
| 200 VLAN0200 | active | |
| 1002 fddi-default | act/unsup | |
| 1003 trcrf-default | act/unsup | |
| 1004 fddinet-default | act/unsup | |
| 1005 trbrf-default | act/unsup | |

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

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

Remote SPAN VLANs

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

ASW2#

ASW2#show spanning-tree

VLAN0020

| | | | |
|-------------------------------------|----------|----------------|--|
| Spanning tree enabled protocol ieee | | | |
| Root ID | Priority | 4116 | |
| | Address | 000b.fd20.ba00 | |
| | Cost | 9 | |

Port 65 (Port-channell)
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 | 10/100BaseTX | disabled | 20 | auto | auto | |
| Fa0/10 | 10/100BaseTX | disabled | 20 | auto | auto | |
| Fa0/11 | 10/100BaseTX | disabled | 20 | auto | auto | |
| Fa0/12 | 10/100BaseTX | disabled | 20 | auto | auto | |
| Fa0/13 | 10/100BaseTX | disabled | 20 | auto | auto | |

| | | | | |
|--------------|------------|-------|--------|-------|
| Fa0/14 | disabled | 20 | auto | auto |
| 10/100BaseTX | | | | |
| Fa0/15 | notconnect | 20 | auto | auto |
| 10/100BaseTX | | | | |
| Fa0/16 | connected | trunk | a-full | a-100 |
| 10/100BaseTX | | | | |
| Fa0/17 | connected | trunk | a-full | a-100 |
| 10/100BaseTX | | | | |
| Fa0/18 | connected | trunk | a-full | a-100 |
| 10/100BaseTX | | | | |
| Fa0/19 | connected | trunk | a-full | a-100 |
| 10/100BaseTX | | | | |
| Fa0/20 | connected | trunk | a-full | a-100 |
| 10/100BaseTX | | | | |
| Fa0/21 | connected | trunk | a-full | a-100 |
| 10/100BaseTX | | | | |
| Fa0/22 | notconnect | 1 | auto | auto |
| 10/100BaseTX | | | | |
| Fa0/23 | notconnect | 1 | auto | auto |
| 10/100BaseTX | | | | |
| Fa0/24 | notconnect | 1 | auto | auto |
| 10/100BaseTX | | | | |
| Po1 | connected | trunk | a-full | a-100 |
| Po2 | connected | trunk | a-full | a-100 |
| ASW2# | | | | |

ASW2#show interfaces switchport

Name: Fa0/1

Switchport: Enabled

Administrative Mode: static access

Operational Mode: down

Administrative Trunking Encapsulation: dot1q

Negotiation of Trunking: Off

Access Mode VLAN: 20 (VLAN0020)

Trunking Native Mode VLAN: 1 (default)

Voice VLAN: none

Administrative private-vlan host-association: none

Administrative private-vlan mapping: none

Administrative private-vlan trunk native VLAN: none

Administrative private-vlan trunk encapsulation: dot1q

Administrative private-vlan trunk normal VLANs: none

Administrative private-vlan trunk private VLANs: none

Operational private-vlan: none

Trunking VLANs Enabled: ALL

Pruning VLANs Enabled: 2-1001

Capture Mode Disabled

Capture VLANs Allowed: ALL

Protected: false

Appliance trust: none

Name: Fa0/2

Switchport: Enabled

Administrative Mode: static access

Operational Mode: down

Administrative Trunking Encapsulation: dot1q

Negotiation of Trunking: Off

Access Mode VLAN: 20 (VLAN0020)

Trunking Native Mode VLAN: 1 (default)

Voice VLAN: none

Administrative private-vlan host-association: none

Administrative private-vlan mapping: none

Administrative private-vlan trunk native VLAN: none

Administrative private-vlan trunk encapsulation: dot1q

Administrative private-vlan trunk normal VLANs: none

Administrative private-vlan trunk private VLANs: none

Operational private-vlan: none

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

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

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

Name: Fa0/5

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

Name: Fa0/6

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

Name: Fa0/7

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

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

Name: Fa0/8

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

Name: Fa0/9

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

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

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

Name: Fa0/11
Switchport: Enabled
Administrative Mode: static access
Operational Mode: down
Administrative Trunking Encapsulation: dot1q
Negotiation of Trunking: Off
Access Mode VLAN: 20 (VLAN0020)
Trunking Native Mode VLAN: 1 (default)
Voice VLAN: none
Administrative private-vlan host-association: none
Administrative private-vlan mapping: none
Administrative private-vlan trunk native VLAN: none
Administrative private-vlan trunk encapsulation: dot1q
Administrative private-vlan trunk normal VLANs: none
Administrative private-vlan trunk private VLANs: none
Operational private-vlan: none
Trunking VLANs Enabled: ALL
Pruning VLANs Enabled: 2-1001
Capture Mode Disabled
Capture VLANs Allowed: ALL
Protected: false
Appliance trust: none

Name: Fa0/12
Switchport: Enabled

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

Name: Fa0/13
Switchport: Enabled
Administrative Mode: static access
Operational Mode: down
Administrative Trunking Encapsulation: dot1q
Negotiation of Trunking: Off
Access Mode VLAN: 20 (VLAN0020)
Trunking Native Mode VLAN: 1 (default)
Voice VLAN: none
Administrative private-vlan host-association: none
Administrative private-vlan mapping: none
Administrative private-vlan trunk native VLAN: none
Administrative private-vlan trunk encapsulation: dot1q
Administrative private-vlan trunk normal VLANs: none
Administrative private-vlan trunk private VLANs: none
Operational private-vlan: none
Trunking VLANs Enabled: ALL
Pruning VLANs Enabled: 2-1001
Capture Mode Disabled
Capture VLANs Allowed: ALL
Protected: false
Appliance trust: none

Name: Fa0/14
Switchport: Enabled
Administrative Mode: static access
Operational Mode: down
Administrative Trunking Encapsulation: dot1q
Negotiation of Trunking: Off
Access Mode VLAN: 20 (VLAN0020)
Trunking Native Mode VLAN: 1 (default)
Voice VLAN: none
Administrative private-vlan host-association: none

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

Name: Fa0/15
Switchport: Enabled
Administrative Mode: static access
Operational Mode: down
Administrative Trunking Encapsulation: dot1q
Negotiation of Trunking: Off
Access Mode VLAN: 20 (VLAN0020)
Trunking Native Mode VLAN: 1 (default)
Voice VLAN: none
Administrative private-vlan host-association: none
Administrative private-vlan mapping: none
Administrative private-vlan trunk native VLAN: none
Administrative private-vlan trunk encapsulation: dot1q
Administrative private-vlan trunk normal VLANs: none
Administrative private-vlan trunk private VLANs: none
Operational private-vlan: none
Trunking VLANs Enabled: ALL
Pruning VLANs Enabled: 2-1001
Capture Mode Disabled
Capture VLANs Allowed: ALL
Protected: false
Appliance trust: none

Name: Fa0/16
Switchport: Enabled
Administrative Mode: trunk
Operational Mode: trunk (member of bundle Po2)
Administrative Trunking Encapsulation: dot1q
Operational Trunking Encapsulation: dot1q
Negotiation of Trunking: On
Access Mode VLAN: 1 (default)
Trunking Native Mode VLAN: 1 (default)
Voice VLAN: none
Administrative private-vlan host-association: none
Administrative private-vlan mapping: none
Administrative private-vlan trunk native VLAN: none
Administrative private-vlan trunk encapsulation: dot1q
Administrative private-vlan trunk normal VLANs: none
Administrative private-vlan trunk private VLANs: none
Operational private-vlan: none
Trunking VLANs Enabled: 20,200

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

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

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

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

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

Name: Fa0/21
Switchport: Enabled
Administrative Mode: trunk
Operational Mode: trunk (member of bundle Po1)
Administrative Trunking Encapsulation: dot1q
Operational Trunking Encapsulation: dot1q

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

Name: Fa0/22
Switchport: Enabled
Administrative Mode: trunk
Operational Mode: down
Administrative Trunking Encapsulation: dot1q
Negotiation of Trunking: On
Access Mode VLAN: 1 (default)
Trunking Native Mode VLAN: 1 (default)
Voice VLAN: none
Administrative private-vlan host-association: none
Administrative private-vlan mapping: none
Administrative private-vlan trunk native VLAN: none
Administrative private-vlan trunk encapsulation: dot1q
Administrative private-vlan trunk normal VLANs: none
Administrative private-vlan trunk private VLANs: none
Operational private-vlan: none
Trunking VLANs Enabled: ALL
Pruning VLANs Enabled: 2-1001
Capture Mode Disabled
Capture VLANs Allowed: ALL
Protected: false
Appliance trust: none

Name: Fa0/23
Switchport: Enabled
Administrative Mode: trunk
Operational Mode: down
Administrative Trunking Encapsulation: dot1q
Negotiation of Trunking: On
Access Mode VLAN: 1 (default)
Trunking Native Mode VLAN: 1 (default)
Voice VLAN: none
Administrative private-vlan host-association: none
Administrative private-vlan mapping: none
Administrative private-vlan trunk native VLAN: none
Administrative private-vlan trunk encapsulation: dot1q

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

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

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

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

```
ASW2#show interfaces trunk
```

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

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

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

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

```
ASW2#
```

```
ASW2#show vtp status
VTP Version                : 2
Configuration Revision     : 40
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                  : 0x63 0xFA 0x67 0x50 0xC8 0xE4 0x66 0xC8
Configuration last modified by 10.2.2.2 at 6-8-10 15:22:39
Local updater ID is 192.168.1.132 on interface Vl200 (lowest numbered
VLAN interface found)
ASW2#
```



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

ASW2#show etherchannel detail

Channel-group listing:

Group: 1

Group state = L2

Ports: 3 Maxports = 8

Port-channels: 1 Max Port-channels = 1

Protocol: PAgP

Ports in the group:

Port: Fa0/19

Port state = Up Mstr In-Bndl

Channel group = 1 Mode = Desirable-S1 Gcchange = 0

Port-channel = Po1 GC = 0x00010001 Pseudo port-channel =

Po1

Port index = 0 Load = 0x00 Protocol = PAgP

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

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

d - PAgP is down.

Timers: H - Hello timer is running. Q - Quit timer is running.

S - Switching timer is running. I - Interface timer is running.

Local information:

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

Partner's information:

| Group | Partner | Partner | Partner | Partner |
|------------------|---------|----------------|---------|-----------|
| Port | Name | Device ID | Port | Age Flags |
| Fa0/19 180001 | DSW2 | 000b.fd20.ba00 | Fa0/16 | 7s SC |

Age of the port in the current state: 0d:00h:30m:21s

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 | Partner | Partner | Partner |
|------------------|---------|----------------|---------|-----------|
| Port | Name | Device ID | Port | Age Flags |
| Fa0/20 180001 | DSW2 | 000b.fd20.ba00 | Fa0/17 | 1s SC |

Age of the port in the current state: 0d:00h:30m:22s

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 | 8s | SC |

Age of the port in the current state: 0d:00h:30m:24s

Port-channels in the group:

Port-channel: Po1

Age of the Port-channel = 0d:00h:32m:45s
 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:00h:30m:25s Fa0/20

Group: 2

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

Protocol: PAgP

Ports in the group:

Port: Fa0/16

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

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

Local information:

| 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 | 14s | SAC |

E0001

Age of the port in the current state: 0d:00h:31m:14s

Port: Fa0/17

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

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

S - Switching timer is running. I - Interface timer is running.

Local information:

| Group | 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 | 15s | SAC |
| E0001 | | | | | |

Age of the port in the current state: 0d:00h:31m:17s

Port: Fa0/18

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

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

Local information:

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

Partner's information:

| Group | Partner | Partner | Partner | Partner | |
|--------|---------|----------------|---------|---------|-------|
| Port | Name | Device ID | Port | Age | Flags |
| Fa0/18 | DSW1 | 000d.bde3.6e00 | Fa0/18 | 3s | SAC |
| E0001 | | | | | |

Age of the port in the current state: 0d:00h:31m:18s

Port-channels in the group:

Port-channel: Po2

Age of the Port-channel = 0d:00h:32m:50s
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:00h:31m:18s Fa0/16

ASW2#

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

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

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

```
ASW2#
```


ASW2#show spanning-tree summary

Switch is in pvst mode

Root bridge for: none

EtherChannel misconfig guard is enabled

Extended system ID is enabled

Portfast Default is disabled

PortFast BPDU Guard Default is disabled

Portfast BPDU Filter Default is disabled

Loopguard Default is disabled

UplinkFast is disabled

BackboneFast is disabled

Pathcost method used is short

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

ASW2#

ASW2#show uddl

Interface Fa0/1

Port enable administrative configuration setting: Disabled

Port enable operational state: Disabled

Current bidirectional state: Unknown

Interface Fa0/2

Port enable administrative configuration setting: Disabled

Port enable operational state: Disabled

Current bidirectional state: Unknown

Interface Fa0/3

Port enable administrative configuration setting: Disabled

Port enable operational state: Disabled

Current bidirectional state: Unknown

Interface Fa0/4

Port enable administrative configuration setting: Disabled

Port enable operational state: Disabled

Current bidirectional state: Unknown

Interface Fa0/5

Port enable administrative configuration setting: Disabled

Port enable operational state: Disabled

Current bidirectional state: Unknown

Interface Fa0/6

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

Interface Fa0/7

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

Interface Fa0/8

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

Interface Fa0/9

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

Interface Fa0/10

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

Interface Fa0/11

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

Interface Fa0/12

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

Interface Fa0/13

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

Interface Fa0/14

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

Interface Fa0/15

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

Interface Fa0/16

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

Interface Fa0/17

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

Interface Fa0/18

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

Interface Fa0/19

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

Interface Fa0/20

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

Interface Fa0/21

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

Interface Fa0/22

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

Interface Fa0/23

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

Interface Fa0/24

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

ASW2#show etherchannel summary
Flags: D - down P - in port-channel
I - stand-alone s - suspended
H - Hot-standby (LACP only)
R - Layer3 S - Layer2
u - unsuitable for bundling

U - in use f - failed to allocate aggregator
d - default port

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

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

ASW2#

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

```
-----
```

```
Group: 1
```

```
-----
```

```
Protocol: PAgP
```

```
Group: 2
```

```
-----
```

```
Protocol: PAgP
```

```
ASW2#
```

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

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

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

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

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

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

```
Local information:
```

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

```
Partner's information:
```

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

```
Age of the port in the current state: 0d:00h:31m:15s
```

```
-----
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 | Partner Count | PAgP Priority | Learning Method |
|-------|--------|-------|-------|--------|----------|---------------|---------------|-----------------|
| | Fa0/20 | 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 |
|-------|--------------|--------------|-------------------|--------------|-------------|---------------|
| | Fa0/20 | DSW2 | 000b.fd20.ba00 | Fa0/17 | 24s | SC |

Age of the port in the current state: 0d:00h:31m:16s

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 | Partner | Partner | Partner |
|--------|---------|----------------|---------|-----------|
| Port | Name | Device ID | Port | Age Flags |
| Fa0/21 | DSW2 | 000b.fd20.ba00 | Fa0/18 | 6s SC |
| 180001 | | | | |

Age of the port in the current state: 0d:00h:31m:17s

Group: 2

Ports in the group:

Port: Fa0/16

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

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

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

d - PAgP is down.

Timers: H - Hello timer is running. Q - Quit timer is running.

S - Switching timer is running. I - Interface timer is running.

Local information:

| 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 | Partner | Partner | Partner |
|--------|---------|----------------|---------|-----------|
| Port | Name | Device ID | Port | Age Flags |
| Fa0/16 | DSW1 | 000d.bde3.6e00 | Fa0/16 | 13s SAC |
| E0001 | | | | |

Age of the port in the current state: 0d:00h:32m:07s

Port: Fa0/17

```

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

```

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

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

d - PAgP is down.

Timers: H - Hello timer is running. Q - Quit timer is running.

S - Switching timer is running. I - Interface timer is running.

Local information:

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

Partner's information:

| Group | Partner Name | Partner Device ID | Partner Port | Partner Age | Partner Flags |
|--------|--------------|-------------------|--------------|-------------|---------------|
| Fa0/17 | DSW1 | 000d.bde3.6e00 | Fa0/17 | 9s | SAC |

Age of the port in the current state: 0d:00h:32m:09s

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 | 25s | SAC |
| E0001 | | | | | |

Age of the port in the current state: 0d:00h:32m:10s

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:00h:33m:54s
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:00h:31m:34s Fa0/20
```

```
Group: 2
-----
```

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

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

```
Age of the Port-channel   = 0d:00h:33m:54s
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:00h:32m:23s 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 |
| Cap. | | | | | |

| | | | | | |
|--------|------|----------------|--------|-----|----|
| Fa0/19 | DSW2 | 000b.fd20.ba00 | Fa0/16 | 5s | SC |
| 180001 | | | | | |
| Fa0/20 | DSW2 | 000b.fd20.ba00 | Fa0/17 | 22s | SC |
| 180001 | | | | | |
| Fa0/21 | DSW2 | 000b.fd20.ba00 | Fa0/18 | 1s | SC |
| 180001 | | | | | |

Channel group 2 neighbors

| Group | Partner | Partner | Partner | Partner | |
|--------|---------|----------------|---------|---------|-------|
| Port | Name | Device ID | Port | Age | Flags |
| Cap. | | | | | |
| Fa0/16 | DSW1 | 000d.bde3.6e00 | Fa0/16 | 9s | SAC |
| E0001 | | | | | |
| Fa0/17 | DSW1 | 000d.bde3.6e00 | Fa0/17 | 3s | 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 Action | MaxSecureAddr (Count) | CurrentAddr (Count) | SecurityViolation (Count) | Security |
|-----------------------|--------------------------|------------------------|------------------------------|----------|
|-----------------------|--------------------------|------------------------|------------------------------|----------|

| | | | | |
|----------|---|---|---|--|
| -- | | | | |
| 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#
```

