

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

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

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

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

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

ASW2#

```
ASW2#show ip interface brief
```

| Interface        | IP-Address    | OK? | Method | Status           |
|------------------|---------------|-----|--------|------------------|
| Protocol         |               |     |        |                  |
| Vlan1            | unassigned    | YES | NVRAM  | administratively |
| down down        |               |     |        |                  |
| Vlan200          | 192.168.1.132 | YES | NVRAM  | up               |
| up               |               |     |        |                  |
| FastEthernet0/1  | unassigned    | YES | unset  | administratively |
| down down        |               |     |        |                  |
| FastEthernet0/2  | unassigned    | YES | unset  | administratively |
| down down        |               |     |        |                  |
| FastEthernet0/3  | unassigned    | YES | unset  | administratively |
| down down        |               |     |        |                  |
| FastEthernet0/4  | unassigned    | YES | unset  | administratively |
| down down        |               |     |        |                  |
| FastEthernet0/5  | unassigned    | YES | unset  | administratively |
| down down        |               |     |        |                  |
| FastEthernet0/6  | unassigned    | YES | unset  | administratively |
| down down        |               |     |        |                  |
| FastEthernet0/7  | unassigned    | YES | unset  | administratively |
| down down        |               |     |        |                  |
| FastEthernet0/8  | unassigned    | YES | unset  | administratively |
| down down        |               |     |        |                  |
| FastEthernet0/9  | unassigned    | YES | unset  | administratively |
| down down        |               |     |        |                  |
| FastEthernet0/10 | unassigned    | YES | unset  | administratively |
| down down        |               |     |        |                  |
| FastEthernet0/11 | unassigned    | YES | unset  | administratively |
| down down        |               |     |        |                  |

|                               |            |     |       |                  |
|-------------------------------|------------|-----|-------|------------------|
| FastEthernet0/12<br>down down | unassigned | YES | unset | administratively |
| FastEthernet0/13<br>down down | unassigned | YES | unset | administratively |
| FastEthernet0/14<br>down down | unassigned | YES | unset | administratively |
| FastEthernet0/15<br>down      | unassigned | YES | unset | down             |
| FastEthernet0/16<br>up        | unassigned | YES | unset | up               |
| FastEthernet0/17<br>up        | unassigned | YES | unset | up               |
| FastEthernet0/18<br>up        | unassigned | YES | unset | up               |
| FastEthernet0/19<br>up        | unassigned | YES | unset | up               |
| FastEthernet0/20<br>up        | unassigned | YES | unset | up               |
| FastEthernet0/21<br>up        | unassigned | YES | unset | up               |
| FastEthernet0/22<br>down      | unassigned | YES | unset | down             |
| FastEthernet0/23<br>down      | unassigned | YES | unset | down             |
| FastEthernet0/24<br>down      | unassigned | YES | unset | down             |
| Port-channel1<br>up           | unassigned | YES | unset | up               |
| Port-channel2<br>up           | unassigned | YES | unset | up               |

ASW2#









ASW2#show interfaces

Vlan1 is administratively down, line protocol is down

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

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

Encapsulation ARPA, loopback not set

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

Last input never, output never, output hang never

Last clearing of "show interface" counters never

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

Queueing strategy: fifo

Output queue: 0/40 (size/max)

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

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

0 packets input, 0 bytes, 0 no buffer

Received 0 broadcasts (0 IP multicast)

0 runts, 0 giants, 0 throttles

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

0 packets output, 0 bytes, 0 underruns

0 output errors, 3 interface resets

0 output buffer failures, 0 output buffers swapped out

Vlan200 is up, line protocol is up

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

Internet address is 192.168.1.132/27

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

Encapsulation ARPA, loopback not set

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

Last input 01:05:54, output never, output hang never

Last clearing of "show interface" counters never

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

Queueing strategy: fifo

Output queue: 0/40 (size/max)

5 minute input rate 1000 bits/sec, 1 packets/sec

5 minute output rate 9000 bits/sec, 1 packets/sec

15355 packets input, 1305670 bytes, 0 no buffer

Received 5 broadcasts (0 IP multicast)

0 runts, 0 giants, 0 throttles

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

17726 packets output, 10755054 bytes, 0 underruns

0 output errors, 2 interface resets

0 output buffer failures, 0 output buffers swapped out  
FastEthernet0/1 is administratively down, line protocol is down  
(disabled)

Hardware is Fast Ethernet, address is 0015.fab8.2881 (bia  
0015.fab8.2881)

MTU 1500 bytes, BW 100000 Kbit, DLY 100 usec,  
reliability 255/255, txload 1/255, rxload 1/255

Encapsulation ARPA, loopback not set

Keepalive set (10 sec)

Auto-duplex, Auto-speed, media type is 100BaseTX

input flow-control is unsupported output flow-control is unsupported

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

Last input never, output 02:06:33, output hang never

Last clearing of "show interface" counters never

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

Queueing strategy: fifo

Output queue: 0/40 (size/max)

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

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

1 packets input, 64 bytes, 0 no buffer

Received 0 broadcasts (0 multicast)

0 runts, 0 giants, 0 throttles

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

0 watchdog, 0 multicast, 0 pause input

0 input packets with dribble condition detected

1 packets output, 64 bytes, 0 underruns

0 output errors, 0 collisions, 2 interface resets

0 babbles, 0 late collision, 0 deferred

0 lost carrier, 0 no carrier, 0 PAUSE output

0 output buffer failures, 0 output buffers swapped out

FastEthernet0/2 is administratively down, line protocol is down  
(disabled)

Hardware is Fast Ethernet, address is 0015.fab8.2882 (bia  
0015.fab8.2882)

MTU 1500 bytes, BW 100000 Kbit, DLY 100 usec,  
reliability 255/255, txload 1/255, rxload 1/255

Encapsulation ARPA, loopback not set

Keepalive set (10 sec)

Auto-duplex, Auto-speed, media type is 100BaseTX

input flow-control is unsupported output flow-control is unsupported

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

Last input never, output 02:06:35, output hang never

Last clearing of "show interface" counters never

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

Queueing strategy: fifo

Output queue: 0/40 (size/max)

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

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

1 packets input, 64 bytes, 0 no buffer

Received 0 broadcasts (0 multicast)

0 runts, 0 giants, 0 throttles

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

0 watchdog, 0 multicast, 0 pause input

0 input packets with dribble condition detected

```
    1 packets output, 64 bytes, 0 underruns
    0 output errors, 0 collisions, 2 interface resets
    0 babbles, 0 late collision, 0 deferred
    0 lost carrier, 0 no carrier, 0 PAUSE output
    0 output buffer failures, 0 output buffers swapped out
FastEthernet0/3 is administratively down, line protocol is down
(disabled)
  Hardware is Fast Ethernet, address is 0015.fab8.2883 (bia
0015.fab8.2883)
  MTU 1500 bytes, BW 100000 Kbit, DLY 100 usec,
    reliability 255/255, txload 1/255, rxload 1/255
  Encapsulation ARPA, loopback not set
  Keepalive set (10 sec)
  Auto-duplex, Auto-speed, media type is 100BaseTX
  input flow-control is unsupported output flow-control is unsupported
  ARP type: ARPA, ARP Timeout 04:00:00
  Last input never, output 02:06:37, output hang never
  Last clearing of "show interface" counters never
  Input queue: 0/75/0/0 (size/max/drops/flushes); Total output drops: 0
  Queueing strategy: fifo
  Output queue: 0/40 (size/max)
  5 minute input rate 0 bits/sec, 0 packets/sec
  5 minute output rate 0 bits/sec, 0 packets/sec
    1 packets input, 64 bytes, 0 no buffer
    Received 0 broadcasts (0 multicast)
    0 runts, 0 giants, 0 throttles
    0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
    0 watchdog, 0 multicast, 0 pause input
    0 input packets with dribble condition detected
    1 packets output, 64 bytes, 0 underruns
    0 output errors, 0 collisions, 2 interface resets
    0 babbles, 0 late collision, 0 deferred
    0 lost carrier, 0 no carrier, 0 PAUSE output
    0 output buffer failures, 0 output buffers swapped out
FastEthernet0/4 is administratively down, line protocol is down
(disabled)
  Hardware is Fast Ethernet, address is 0015.fab8.2884 (bia
0015.fab8.2884)
  MTU 1500 bytes, BW 100000 Kbit, DLY 100 usec,
    reliability 255/255, txload 1/255, rxload 1/255
  Encapsulation ARPA, loopback not set
  Keepalive set (10 sec)
  Auto-duplex, Auto-speed, media type is 100BaseTX
  input flow-control is unsupported output flow-control is unsupported
  ARP type: ARPA, ARP Timeout 04:00:00
  Last input never, output 02:06:38, output hang never
  Last clearing of "show interface" counters never
  Input queue: 0/75/0/0 (size/max/drops/flushes); Total output drops: 0
  Queueing strategy: fifo
  Output queue: 0/40 (size/max)
  5 minute input rate 0 bits/sec, 0 packets/sec
  5 minute output rate 0 bits/sec, 0 packets/sec
    1 packets input, 64 bytes, 0 no buffer
    Received 0 broadcasts (0 multicast)
```

```
0 runts, 0 giants, 0 throttles
0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
0 watchdog, 0 multicast, 0 pause input
0 input packets with dribble condition detected
1 packets output, 64 bytes, 0 underruns
0 output errors, 0 collisions, 2 interface resets
0 babbles, 0 late collision, 0 deferred
0 lost carrier, 0 no carrier, 0 PAUSE output
0 output buffer failures, 0 output buffers swapped out
FastEthernet0/5 is administratively down, line protocol is down
(disabled)
Hardware is Fast Ethernet, address is 0015.fab8.2885 (bia
0015.fab8.2885)
MTU 1500 bytes, BW 100000 Kbit, DLY 100 usec,
  reliability 255/255, txload 1/255, rxload 1/255
Encapsulation ARPA, loopback not set
Keepalive set (10 sec)
Auto-duplex, Auto-speed, media type is 100BaseTX
input flow-control is unsupported output flow-control is unsupported
ARP type: ARPA, ARP Timeout 04:00:00
Last input never, output 02:06:40, output hang never
Last clearing of "show interface" counters never
Input queue: 0/75/0/0 (size/max/drops/flushes); Total output drops: 0
Queueing strategy: fifo
Output queue: 0/40 (size/max)
5 minute input rate 0 bits/sec, 0 packets/sec
5 minute output rate 0 bits/sec, 0 packets/sec
  1 packets input, 64 bytes, 0 no buffer
Received 0 broadcasts (0 multicast)
0 runts, 0 giants, 0 throttles
0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
0 watchdog, 0 multicast, 0 pause input
0 input packets with dribble condition detected
1 packets output, 64 bytes, 0 underruns
0 output errors, 0 collisions, 2 interface resets
0 babbles, 0 late collision, 0 deferred
0 lost carrier, 0 no carrier, 0 PAUSE output
0 output buffer failures, 0 output buffers swapped out
FastEthernet0/6 is administratively down, line protocol is down
(disabled)
Hardware is Fast Ethernet, address is 0015.fab8.2886 (bia
0015.fab8.2886)
MTU 1500 bytes, BW 100000 Kbit, DLY 100 usec,
  reliability 255/255, txload 1/255, rxload 1/255
Encapsulation ARPA, loopback not set
Keepalive set (10 sec)
Auto-duplex, Auto-speed, media type is 100BaseTX
input flow-control is unsupported output flow-control is unsupported
ARP type: ARPA, ARP Timeout 04:00:00
Last input never, output 02:06:42, output hang never
Last clearing of "show interface" counters never
Input queue: 0/75/0/0 (size/max/drops/flushes); Total output drops: 0
Queueing strategy: fifo
Output queue: 0/40 (size/max)
```

```
5 minute input rate 0 bits/sec, 0 packets/sec
5 minute output rate 0 bits/sec, 0 packets/sec
  1 packets input, 64 bytes, 0 no buffer
  Received 0 broadcasts (0 multicast)
  0 runts, 0 giants, 0 throttles
  0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
  0 watchdog, 0 multicast, 0 pause input
  0 input packets with dribble condition detected
  1 packets output, 64 bytes, 0 underruns
  0 output errors, 0 collisions, 2 interface resets
  0 babbles, 0 late collision, 0 deferred
  0 lost carrier, 0 no carrier, 0 PAUSE output
  0 output buffer failures, 0 output buffers swapped out
FastEthernet0/7 is administratively down, line protocol is down
(disabled)
  Hardware is Fast Ethernet, address is 0015.fab8.2887 (bia
0015.fab8.2887)
  MTU 1500 bytes, BW 100000 Kbit, DLY 100 usec,
    reliability 255/255, txload 1/255, rxload 1/255
  Encapsulation ARPA, loopback not set
  Keepalive set (10 sec)
  Auto-duplex, Auto-speed, media type is 100BaseTX
  input flow-control is unsupported output flow-control is unsupported
  ARP type: ARPA, ARP Timeout 04:00:00
  Last input never, output 02:06:43, output hang never
  Last clearing of "show interface" counters never
  Input queue: 0/75/0/0 (size/max/drops/flushes); Total output drops: 0
  Queueing strategy: fifo
  Output queue: 0/40 (size/max)
5 minute input rate 0 bits/sec, 0 packets/sec
5 minute output rate 0 bits/sec, 0 packets/sec
  1 packets input, 64 bytes, 0 no buffer
  Received 0 broadcasts (0 multicast)
  0 runts, 0 giants, 0 throttles
  0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
  0 watchdog, 0 multicast, 0 pause input
  0 input packets with dribble condition detected
  1 packets output, 64 bytes, 0 underruns
  0 output errors, 0 collisions, 2 interface resets
  0 babbles, 0 late collision, 0 deferred
  0 lost carrier, 0 no carrier, 0 PAUSE output
  0 output buffer failures, 0 output buffers swapped out
FastEthernet0/8 is administratively down, line protocol is down
(disabled)
  Hardware is Fast Ethernet, address is 0015.fab8.2888 (bia
0015.fab8.2888)
  MTU 1500 bytes, BW 100000 Kbit, DLY 100 usec,
    reliability 255/255, txload 1/255, rxload 1/255
  Encapsulation ARPA, loopback not set
  Keepalive set (10 sec)
  Auto-duplex, Auto-speed, media type is 100BaseTX
  input flow-control is unsupported output flow-control is unsupported
  ARP type: ARPA, ARP Timeout 04:00:00
  Last input never, output 02:06:45, output hang never
```

Last clearing of "show interface" counters never  
Input queue: 0/75/0/0 (size/max/drops/flushes); Total output drops: 0  
Queueing strategy: fifo  
Output queue: 0/40 (size/max)  
5 minute input rate 0 bits/sec, 0 packets/sec  
5 minute output rate 0 bits/sec, 0 packets/sec  
1 packets input, 64 bytes, 0 no buffer  
Received 0 broadcasts (0 multicast)  
0 runts, 0 giants, 0 throttles  
0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored  
0 watchdog, 0 multicast, 0 pause input  
0 input packets with dribble condition detected  
1 packets output, 64 bytes, 0 underruns  
0 output errors, 0 collisions, 2 interface resets  
0 babbles, 0 late collision, 0 deferred  
0 lost carrier, 0 no carrier, 0 PAUSE output  
0 output buffer failures, 0 output buffers swapped out  
FastEthernet0/9 is administratively down, line protocol is down  
(disabled)

Hardware is Fast Ethernet, address is 0015.fab8.2889 (bia  
0015.fab8.2889)  
MTU 1500 bytes, BW 100000 Kbit, DLY 100 usec,  
reliability 255/255, txload 1/255, rxload 1/255  
Encapsulation ARPA, loopback not set  
Keepalive set (10 sec)  
Auto-duplex, Auto-speed, media type is 100BaseTX  
input flow-control is unsupported output flow-control is unsupported  
ARP type: ARPA, ARP Timeout 04:00:00  
Last input never, output 02:06:46, output hang never  
Last clearing of "show interface" counters never  
Input queue: 0/75/0/0 (size/max/drops/flushes); Total output drops: 0  
Queueing strategy: fifo  
Output queue: 0/40 (size/max)  
5 minute input rate 0 bits/sec, 0 packets/sec  
5 minute output rate 0 bits/sec, 0 packets/sec  
1 packets input, 64 bytes, 0 no buffer  
Received 0 broadcasts (0 multicast)  
0 runts, 0 giants, 0 throttles  
0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored  
0 watchdog, 0 multicast, 0 pause input  
0 input packets with dribble condition detected  
1 packets output, 64 bytes, 0 underruns  
0 output errors, 0 collisions, 2 interface resets  
0 babbles, 0 late collision, 0 deferred  
0 lost carrier, 0 no carrier, 0 PAUSE output  
0 output buffer failures, 0 output buffers swapped out  
FastEthernet0/10 is administratively down, line protocol is down  
(disabled)

Hardware is Fast Ethernet, address is 0015.fab8.288a (bia  
0015.fab8.288a)  
MTU 1500 bytes, BW 100000 Kbit, DLY 100 usec,  
reliability 255/255, txload 1/255, rxload 1/255  
Encapsulation ARPA, loopback not set  
Keepalive set (10 sec)

Auto-duplex, Auto-speed, media type is 100BaseTX  
input flow-control is unsupported output flow-control is unsupported  
ARP type: ARPA, ARP Timeout 04:00:00  
Last input never, output 02:06:48, output hang never  
Last clearing of "show interface" counters never  
Input queue: 0/75/0/0 (size/max/drops/flushes); Total output drops: 0  
Queueing strategy: fifo  
Output queue: 0/40 (size/max)  
5 minute input rate 0 bits/sec, 0 packets/sec  
5 minute output rate 0 bits/sec, 0 packets/sec  
1 packets input, 64 bytes, 0 no buffer  
Received 0 broadcasts (0 multicast)  
0 runts, 0 giants, 0 throttles  
0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored  
0 watchdog, 0 multicast, 0 pause input  
0 input packets with dribble condition detected  
1 packets output, 64 bytes, 0 underruns  
0 output errors, 0 collisions, 2 interface resets  
0 babbles, 0 late collision, 0 deferred  
0 lost carrier, 0 no carrier, 0 PAUSE output  
0 output buffer failures, 0 output buffers swapped out  
FastEthernet0/11 is administratively down, line protocol is down  
(disabled)

Hardware is Fast Ethernet, address is 0015.fab8.288b (bia  
0015.fab8.288b)  
MTU 1500 bytes, BW 100000 Kbit, DLY 100 usec,  
reliability 255/255, txload 1/255, rxload 1/255  
Encapsulation ARPA, loopback not set  
Keepalive set (10 sec)  
Auto-duplex, Auto-speed, media type is 100BaseTX  
input flow-control is unsupported output flow-control is unsupported  
ARP type: ARPA, ARP Timeout 04:00:00  
Last input never, output 02:06:49, output hang never  
Last clearing of "show interface" counters never  
Input queue: 0/75/0/0 (size/max/drops/flushes); Total output drops: 0  
Queueing strategy: fifo  
Output queue: 0/40 (size/max)  
5 minute input rate 0 bits/sec, 0 packets/sec  
5 minute output rate 0 bits/sec, 0 packets/sec  
1 packets input, 64 bytes, 0 no buffer  
Received 0 broadcasts (0 multicast)  
0 runts, 0 giants, 0 throttles  
0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored  
0 watchdog, 0 multicast, 0 pause input  
0 input packets with dribble condition detected  
1 packets output, 64 bytes, 0 underruns  
0 output errors, 0 collisions, 2 interface resets  
0 babbles, 0 late collision, 0 deferred  
0 lost carrier, 0 no carrier, 0 PAUSE output  
0 output buffer failures, 0 output buffers swapped out  
FastEthernet0/12 is administratively down, line protocol is down  
(disabled)

Hardware is Fast Ethernet, address is 0015.fab8.288c (bia  
0015.fab8.288c)



MTU 1500 bytes, BW 100000 Kbit, DLY 100 usec,  
reliability 255/255, txload 1/255, rxload 1/255  
Encapsulation ARPA, loopback not set  
Keepalive set (10 sec)  
Auto-duplex, Auto-speed, media type is 100BaseTX  
input flow-control is unsupported output flow-control is unsupported  
ARP type: ARPA, ARP Timeout 04:00:00  
Last input never, output 02:06:51, output hang never  
Last clearing of "show interface" counters never  
Input queue: 0/75/0/0 (size/max/drops/flushes); Total output drops: 0  
Queueing strategy: fifo  
Output queue: 0/40 (size/max)  
5 minute input rate 0 bits/sec, 0 packets/sec  
5 minute output rate 0 bits/sec, 0 packets/sec  
1 packets input, 64 bytes, 0 no buffer  
Received 0 broadcasts (0 multicast)  
0 runts, 0 giants, 0 throttles  
0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored  
0 watchdog, 0 multicast, 0 pause input  
0 input packets with dribble condition detected  
1 packets output, 64 bytes, 0 underruns  
0 output errors, 0 collisions, 2 interface resets  
0 babbles, 0 late collision, 0 deferred  
0 lost carrier, 0 no carrier, 0 PAUSE output  
0 output buffer failures, 0 output buffers swapped out  
FastEthernet0/13 is administratively down, line protocol is down  
(disabled)

Hardware is Fast Ethernet, address is 0015.fab8.288d (bia 0015.fab8.288d)

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

FastEthernet0/14 is administratively down, line protocol is down (disabled)  
Hardware is Fast Ethernet, address is 0015.fab8.288e (bia 0015.fab8.288e)  
MTU 1500 bytes, BW 100000 Kbit, DLY 100 usec,  
reliability 255/255, txload 1/255, rxload 1/255  
Encapsulation ARPA, loopback not set  
Keepalive set (10 sec)  
Auto-duplex, Auto-speed, media type is 100BaseTX  
input flow-control is unsupported output flow-control is unsupported  
ARP type: ARPA, ARP Timeout 04:00:00  
Last input never, output 02:06:54, output hang never  
Last clearing of "show interface" counters never  
Input queue: 0/75/0/0 (size/max/drops/flushes); Total output drops: 0  
Queueing strategy: fifo  
Output queue: 0/40 (size/max)  
5 minute input rate 0 bits/sec, 0 packets/sec  
5 minute output rate 0 bits/sec, 0 packets/sec  
1 packets input, 64 bytes, 0 no buffer  
Received 0 broadcasts (0 multicast)  
0 runts, 0 giants, 0 throttles  
0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored  
0 watchdog, 0 multicast, 0 pause input  
0 input packets with dribble condition detected  
1 packets output, 64 bytes, 0 underruns  
0 output errors, 0 collisions, 2 interface resets  
0 babbles, 0 late collision, 0 deferred  
0 lost carrier, 0 no carrier, 0 PAUSE output  
0 output buffer failures, 0 output buffers swapped out

FastEthernet0/15 is down, line protocol is down (notconnect)  
Hardware is Fast Ethernet, address is 0015.fab8.288f (bia 0015.fab8.288f)  
MTU 1500 bytes, BW 100000 Kbit, DLY 100 usec,  
reliability 255/255, txload 1/255, rxload 1/255  
Encapsulation ARPA, loopback not set  
Keepalive set (10 sec)  
Auto-duplex, Auto-speed, media type is 100BaseTX  
input flow-control is unsupported output flow-control is unsupported  
ARP type: ARPA, ARP Timeout 04:00:00  
Last input never, output 02:06:56, output hang never  
Last clearing of "show interface" counters never  
Input queue: 0/75/0/0 (size/max/drops/flushes); Total output drops: 0  
Queueing strategy: fifo  
Output queue: 0/40 (size/max)  
5 minute input rate 0 bits/sec, 0 packets/sec  
5 minute output rate 0 bits/sec, 0 packets/sec  
1 packets input, 64 bytes, 0 no buffer  
Received 0 broadcasts (0 multicast)  
0 runts, 0 giants, 0 throttles  
0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored  
0 watchdog, 0 multicast, 0 pause input  
0 input packets with dribble condition detected  
1 packets output, 64 bytes, 0 underruns  
0 output errors, 0 collisions, 2 interface resets

```
    0 babbles, 0 late collision, 0 deferred
    0 lost carrier, 0 no carrier, 0 PAUSE output
    0 output buffer failures, 0 output buffers swapped out
FastEthernet0/16 is up, line protocol is up (connected)
  Hardware is Fast Ethernet, address is 0015.fab8.2890 (bia
0015.fab8.2890)
  MTU 1500 bytes, BW 100000 Kbit, DLY 100 usec,
    reliability 255/255, txload 1/255, rxload 1/255
  Encapsulation ARPA, loopback not set
  Keepalive set (10 sec)
  Full-duplex, 100Mb/s, media type is 100BaseTX
  input flow-control is unsupported output flow-control is unsupported
  ARP type: ARPA, ARP Timeout 04:00:00
  Last input 00:00:16, output 00:00:01, output hang never
  Last clearing of "show interface" counters never
  Input queue: 0/75/0/0 (size/max/drops/flushes); Total output drops: 0
  Queueing strategy: fifo
  Output queue: 0/40 (size/max)
  5 minute input rate 0 bits/sec, 0 packets/sec
  5 minute output rate 0 bits/sec, 0 packets/sec
    3318 packets input, 300227 bytes, 0 no buffer
    Received 2537 broadcasts (0 multicast)
    0 runts, 0 giants, 0 throttles
    0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
    0 watchdog, 2523 multicast, 0 pause input
    0 input packets with dribble condition detected
    2708 packets output, 255320 bytes, 0 underruns
    0 output errors, 0 collisions, 2 interface resets
    0 babbles, 0 late collision, 0 deferred
    0 lost carrier, 0 no carrier, 0 PAUSE output
    0 output buffer failures, 0 output buffers swapped out
FastEthernet0/17 is up, line protocol is up (connected)
  Hardware is Fast Ethernet, address is 0015.fab8.2891 (bia
0015.fab8.2891)
  MTU 1500 bytes, BW 100000 Kbit, DLY 100 usec,
    reliability 255/255, txload 1/255, rxload 1/255
  Encapsulation ARPA, loopback not set
  Keepalive set (10 sec)
  Full-duplex, 100Mb/s, media type is 100BaseTX
  input flow-control is unsupported output flow-control is unsupported
  ARP type: ARPA, ARP Timeout 04:00:00
  Last input 00:00:23, output 00:00:03, output hang never
  Last clearing of "show interface" counters never
  Input queue: 0/75/0/0 (size/max/drops/flushes); Total output drops: 0
  Queueing strategy: fifo
  Output queue: 0/40 (size/max)
  5 minute input rate 0 bits/sec, 0 packets/sec
  5 minute output rate 0 bits/sec, 0 packets/sec
    1356 packets input, 135114 bytes, 0 no buffer
    Received 656 broadcasts (0 multicast)
    0 runts, 0 giants, 0 throttles
    0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
    0 watchdog, 655 multicast, 0 pause input
    0 input packets with dribble condition detected
```

```
6835 packets output, 568245 bytes, 0 underruns
0 output errors, 0 collisions, 2 interface resets
0 babbles, 0 late collision, 0 deferred
0 lost carrier, 0 no carrier, 0 PAUSE output
0 output buffer failures, 0 output buffers swapped out
FastEthernet0/18 is up, line protocol is up (connected)
Hardware is Fast Ethernet, address is 0015.fab8.2892 (bia
0015.fab8.2892)
MTU 1500 bytes, BW 100000 Kbit, DLY 100 usec,
  reliability 255/255, txload 1/255, rxload 1/255
Encapsulation ARPA, loopback not set
Keepalive set (10 sec)
Full-duplex, 100Mb/s, media type is 100BaseTX
input flow-control is unsupported output flow-control is unsupported
ARP type: ARPA, ARP Timeout 04:00:00
Last input 00:00:20, output 00:00:05, output hang never
Last clearing of "show interface" counters never
Input queue: 0/75/0/0 (size/max/drops/flushes); Total output drops: 0
Queueing strategy: fifo
Output queue: 0/40 (size/max)
5 minute input rate 0 bits/sec, 0 packets/sec
5 minute output rate 0 bits/sec, 0 packets/sec
  4860 packets input, 387836 bytes, 0 no buffer
  Received 4160 broadcasts (0 multicast)
  0 runts, 0 giants, 0 throttles
  0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
  0 watchdog, 4160 multicast, 0 pause input
  0 input packets with dribble condition detected
  2015 packets output, 201236 bytes, 0 underruns
  0 output errors, 0 collisions, 2 interface resets
  0 babbles, 0 late collision, 0 deferred
  0 lost carrier, 0 no carrier, 0 PAUSE output
  0 output buffer failures, 0 output buffers swapped out
FastEthernet0/19 is up, line protocol is up (connected)
Hardware is Fast Ethernet, address is 0015.fab8.2893 (bia
0015.fab8.2893)
MTU 1500 bytes, BW 100000 Kbit, DLY 100 usec,
  reliability 255/255, txload 1/255, rxload 1/255
Encapsulation ARPA, loopback not set
Keepalive set (10 sec)
Full-duplex, 100Mb/s, media type is 100BaseTX
input flow-control is unsupported output flow-control is unsupported
ARP type: ARPA, ARP Timeout 04:00:00
Last input 00:00:12, output 00:00:06, output hang never
Last clearing of "show interface" counters never
Input queue: 0/75/0/0 (size/max/drops/flushes); Total output drops: 0
Queueing strategy: fifo
Output queue: 0/40 (size/max)
5 minute input rate 0 bits/sec, 0 packets/sec
5 minute output rate 0 bits/sec, 0 packets/sec
  3608 packets input, 325050 bytes, 0 no buffer
  Received 2721 broadcasts (0 multicast)
  0 runts, 0 giants, 0 throttles
  0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
```

```
0 watchdog, 2720 multicast, 0 pause input
0 input packets with dribble condition detected
1540 packets output, 154608 bytes, 0 underruns
0 output errors, 0 collisions, 2 interface resets
0 babbles, 0 late collision, 0 deferred
0 lost carrier, 0 no carrier, 0 PAUSE output
0 output buffer failures, 0 output buffers swapped out
FastEthernet0/20 is up, line protocol is up (connected)
Hardware is Fast Ethernet, address is 0015.fab8.2894 (bia
0015.fab8.2894)
MTU 1500 bytes, BW 100000 Kbit, DLY 100 usec,
  reliability 255/255, txload 1/255, rxload 1/255
Encapsulation ARPA, loopback not set
Keepalive set (10 sec)
Full-duplex, 100Mb/s, media type is 100BaseTX
input flow-control is unsupported output flow-control is unsupported
ARP type: ARPA, ARP Timeout 04:00:00
Last input 00:00:14, output 00:00:08, output hang never
Last clearing of "show interface" counters never
Input queue: 0/75/0/0 (size/max/drops/flushes); Total output drops: 0
Queueing strategy: fifo
Output queue: 0/40 (size/max)
5 minute input rate 0 bits/sec, 0 packets/sec
5 minute output rate 0 bits/sec, 0 packets/sec
  1416 packets input, 141590 bytes, 0 no buffer
  Received 654 broadcasts (0 multicast)
  0 runts, 0 giants, 0 throttles
  0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
  0 watchdog, 654 multicast, 0 pause input
  0 input packets with dribble condition detected
  6980 packets output, 570357 bytes, 0 underruns
  0 output errors, 0 collisions, 2 interface resets
  0 babbles, 0 late collision, 0 deferred
  0 lost carrier, 0 no carrier, 0 PAUSE output
  0 output buffer failures, 0 output buffers swapped out
FastEthernet0/21 is up, line protocol is up (connected)
Hardware is Fast Ethernet, address is 0015.fab8.2895 (bia
0015.fab8.2895)
MTU 1500 bytes, BW 100000 Kbit, DLY 100 usec,
  reliability 255/255, txload 1/255, rxload 1/255
Encapsulation ARPA, loopback not set
Keepalive set (10 sec)
Full-duplex, 100Mb/s, media type is 100BaseTX
input flow-control is unsupported output flow-control is unsupported
ARP type: ARPA, ARP Timeout 04:00:00
Last input 00:00:16, output 00:00:00, output hang never
Last clearing of "show interface" counters never
Input queue: 0/75/0/0 (size/max/drops/flushes); Total output drops: 0
Queueing strategy: fifo
Output queue: 0/40 (size/max)
5 minute input rate 0 bits/sec, 0 packets/sec
5 minute output rate 0 bits/sec, 0 packets/sec
  5443 packets input, 431332 bytes, 0 no buffer
  Received 4694 broadcasts (0 multicast)
```

```
0 runts, 0 giants, 0 throttles
0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
0 watchdog, 4695 multicast, 0 pause input
0 input packets with dribble condition detected
1542 packets output, 155051 bytes, 0 underruns
0 output errors, 0 collisions, 2 interface resets
0 babbles, 0 late collision, 0 deferred
0 lost carrier, 0 no carrier, 0 PAUSE output
0 output buffer failures, 0 output buffers swapped out
FastEthernet0/22 is down, line protocol is down (notconnect)
Hardware is Fast Ethernet, address is 0015.fab8.2896 (bia
0015.fab8.2896)
MTU 1500 bytes, BW 100000 Kbit, DLY 100 usec,
    reliability 255/255, txload 1/255, rxload 1/255
Encapsulation ARPA, loopback not set
Keepalive set (10 sec)
Auto-duplex, Auto-speed, media type is 100BaseTX
input flow-control is unsupported output flow-control is unsupported
ARP type: ARPA, ARP Timeout 04:00:00
Last input never, output 02:07:06, output hang never
Last clearing of "show interface" counters never
Input queue: 0/75/0/0 (size/max/drops/flushes); Total output drops: 0
Queueing strategy: fifo
Output queue: 0/40 (size/max)
5 minute input rate 0 bits/sec, 0 packets/sec
5 minute output rate 0 bits/sec, 0 packets/sec
    1 packets input, 64 bytes, 0 no buffer
Received 0 broadcasts (0 multicast)
0 runts, 0 giants, 0 throttles
0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
0 watchdog, 0 multicast, 0 pause input
0 input packets with dribble condition detected
1 packets output, 64 bytes, 0 underruns
0 output errors, 0 collisions, 2 interface resets
0 babbles, 0 late collision, 0 deferred
0 lost carrier, 0 no carrier, 0 PAUSE output
0 output buffer failures, 0 output buffers swapped out
FastEthernet0/23 is down, line protocol is down (notconnect)
Hardware is Fast Ethernet, address is 0015.fab8.2897 (bia
0015.fab8.2897)
MTU 1500 bytes, BW 100000 Kbit, DLY 100 usec,
    reliability 255/255, txload 1/255, rxload 1/255
Encapsulation ARPA, loopback not set
Keepalive set (10 sec)
Auto-duplex, Auto-speed, media type is 100BaseTX
input flow-control is unsupported output flow-control is unsupported
ARP type: ARPA, ARP Timeout 04:00:00
Last input never, output 02:07:08, output hang never
Last clearing of "show interface" counters never
Input queue: 0/75/0/0 (size/max/drops/flushes); Total output drops: 0
Queueing strategy: fifo
Output queue: 0/40 (size/max)
5 minute input rate 0 bits/sec, 0 packets/sec
5 minute output rate 0 bits/sec, 0 packets/sec
```

```
1 packets input, 64 bytes, 0 no buffer
Received 0 broadcasts (0 multicast)
0 runts, 0 giants, 0 throttles
0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
0 watchdog, 0 multicast, 0 pause input
0 input packets with dribble condition detected
1 packets output, 64 bytes, 0 underruns
0 output errors, 0 collisions, 2 interface resets
0 babbles, 0 late collision, 0 deferred
0 lost carrier, 0 no carrier, 0 PAUSE output
0 output buffer failures, 0 output buffers swapped out
FastEthernet0/24 is down, line protocol is down (notconnect)
Hardware is Fast Ethernet, address is 0015.fab8.2898 (bia
0015.fab8.2898)
MTU 1500 bytes, BW 100000 Kbit, DLY 100 usec,
  reliability 255/255, txload 1/255, rxload 1/255
Encapsulation ARPA, loopback not set
Keepalive set (10 sec)
Auto-duplex, Auto-speed, media type is 100BaseTX
input flow-control is unsupported output flow-control is unsupported
ARP type: ARPA, ARP Timeout 04:00:00
Last input never, output 02:07:10, output hang never
Last clearing of "show interface" counters never
Input queue: 0/75/0/0 (size/max/drops/flushes); Total output drops: 0
Queueing strategy: fifo
Output queue: 0/40 (size/max)
5 minute input rate 0 bits/sec, 0 packets/sec
5 minute output rate 0 bits/sec, 0 packets/sec
  1 packets input, 64 bytes, 0 no buffer
  Received 0 broadcasts (0 multicast)
  0 runts, 0 giants, 0 throttles
  0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
  0 watchdog, 0 multicast, 0 pause input
  0 input packets with dribble condition detected
  1 packets output, 64 bytes, 0 underruns
  0 output errors, 0 collisions, 2 interface resets
  0 babbles, 0 late collision, 0 deferred
  0 lost carrier, 0 no carrier, 0 PAUSE output
  0 output buffer failures, 0 output buffers swapped out
Port-channel1 is up, line protocol is up (connected)
Hardware is EtherChannel, address is 0015.fab8.2894 (bia
0015.fab8.2894)
MTU 1500 bytes, BW 300000 Kbit, DLY 1000 usec,
  reliability 255/255, txload 1/255, rxload 1/255
Encapsulation ARPA, loopback not set
Full-duplex, 100Mb/s, media type is unknown media type
input flow-control is off, output flow-control is off
Members in this channel: Fa0/19 Fa0/20 Fa0/21
ARP type: ARPA, ARP Timeout 04:00:00
Last input 00:00:01, output 00:00:01, output hang never
Last clearing of "show interface" counters never
Input queue: 0/75/0/0 (size/max/drops/flushes); Total output drops: 0
Queueing strategy: fifo
Output queue: 0/40 (size/max)
```

```
5 minute input rate 0 bits/sec, 0 packets/sec
5 minute output rate 0 bits/sec, 0 packets/sec
  10462 packets input, 897754 bytes, 0 no buffer
  Received 8064 broadcasts (0 multicast)
  0 runts, 0 giants, 0 throttles
  0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
  0 watchdog, 8063 multicast, 0 pause input
  0 input packets with dribble condition detected
  9641 packets output, 840743 bytes, 0 underruns
  0 output errors, 0 collisions, 1 interface resets
  0 babbles, 0 late collision, 0 deferred
  0 lost carrier, 0 no carrier, 0 PAUSE output
  0 output buffer failures, 0 output buffers swapped out
Port-channel2 is up, line protocol is up (connected)
  Hardware is EtherChannel, address is 0015.fab8.2892 (bia
0015.fab8.2892)
  MTU 1500 bytes, BW 300000 Kbit, DLY 1000 usec,
    reliability 255/255, txload 1/255, rxload 1/255
  Encapsulation ARPA, loopback not set
  Full-duplex, 100Mb/s, media type is unknown media type
  input flow-control is off, output flow-control is off
  Members in this channel: Fa0/16 Fa0/17 Fa0/18
  ARP type: ARPA, ARP Timeout 04:00:00
  Last input 00:00:01, output 00:00:01, output hang never
  Last clearing of "show interface" counters never
  Input queue: 0/75/0/0 (size/max/drops/flushes); Total output drops: 0
  Queueing strategy: fifo
  Output queue: 0/40 (size/max)
5 minute input rate 1000 bits/sec, 2 packets/sec
5 minute output rate 0 bits/sec, 0 packets/sec
  9497 packets input, 821591 bytes, 0 no buffer
  Received 7319 broadcasts (0 multicast)
  0 runts, 0 giants, 0 throttles
  0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
  0 watchdog, 7304 multicast, 0 pause input
  0 input packets with dribble condition detected
  9521 packets output, 836592 bytes, 0 underruns
  0 output errors, 0 collisions, 1 interface resets
  0 babbles, 0 late collision, 0 deferred
  0 lost carrier, 0 no carrier, 0 PAUSE output
  0 output buffer failures, 0 output buffers swapped out
```

ASW2#



ASW2#show interfaces counters errors

| Port   | Align-Err | FCS-Err | Xmit-Err | Rcv-Err | UnderSize |
|--------|-----------|---------|----------|---------|-----------|
| Fa0/1  | 0         | 0       | 0        | 0       | 0         |
| Fa0/2  | 0         | 0       | 0        | 0       | 0         |
| Fa0/3  | 0         | 0       | 0        | 0       | 0         |
| Fa0/4  | 0         | 0       | 0        | 0       | 0         |
| Fa0/5  | 0         | 0       | 0        | 0       | 0         |
| Fa0/6  | 0         | 0       | 0        | 0       | 0         |
| Fa0/7  | 0         | 0       | 0        | 0       | 0         |
| Fa0/8  | 0         | 0       | 0        | 0       | 0         |
| Fa0/9  | 0         | 0       | 0        | 0       | 0         |
| Fa0/10 | 0         | 0       | 0        | 0       | 0         |
| Fa0/11 | 0         | 0       | 0        | 0       | 0         |
| Fa0/12 | 0         | 0       | 0        | 0       | 0         |
| Fa0/13 | 0         | 0       | 0        | 0       | 0         |
| Fa0/14 | 0         | 0       | 0        | 0       | 0         |
| Fa0/15 | 0         | 0       | 0        | 0       | 0         |
| Fa0/16 | 0         | 0       | 0        | 0       | 0         |
| Fa0/17 | 0         | 0       | 0        | 0       | 0         |
| Fa0/18 | 0         | 0       | 0        | 0       | 0         |
| Fa0/19 | 0         | 0       | 0        | 0       | 0         |
| Fa0/20 | 0         | 0       | 0        | 0       | 0         |
| Fa0/21 | 0         | 0       | 0        | 0       | 0         |
| Fa0/22 | 0         | 0       | 0        | 0       | 0         |
| Fa0/23 | 0         | 0       | 0        | 0       | 0         |
| Fa0/24 | 0         | 0       | 0        | 0       | 0         |
| Po1    | 0         | 0       | 0        | 0       | 0         |
| Po2    | 0         | 0       | 0        | 0       | 0         |

| Port   | Single-Col | Multi-Col | Late-Col | Excess-Col | Carri-Sen | Runts |
|--------|------------|-----------|----------|------------|-----------|-------|
| Giants |            |           |          |            |           |       |
| Fa0/1  | 0          | 0         | 0        | 0          | 0         | 0     |
| 0      |            |           |          |            |           |       |
| Fa0/2  | 0          | 0         | 0        | 0          | 0         | 0     |
| 0      |            |           |          |            |           |       |
| Fa0/3  | 0          | 0         | 0        | 0          | 0         | 0     |
| 0      |            |           |          |            |           |       |
| Fa0/4  | 0          | 0         | 0        | 0          | 0         | 0     |
| 0      |            |           |          |            |           |       |
| Fa0/5  | 0          | 0         | 0        | 0          | 0         | 0     |
| 0      |            |           |          |            |           |       |
| Fa0/6  | 0          | 0         | 0        | 0          | 0         | 0     |
| 0      |            |           |          |            |           |       |
| Fa0/7  | 0          | 0         | 0        | 0          | 0         | 0     |
| 0      |            |           |          |            |           |       |
| Fa0/8  | 0          | 0         | 0        | 0          | 0         | 0     |
| 0      |            |           |          |            |           |       |
| Fa0/9  | 0          | 0         | 0        | 0          | 0         | 0     |
| 0      |            |           |          |            |           |       |
| Fa0/10 | 0          | 0         | 0        | 0          | 0         | 0     |
| 0      |            |           |          |            |           |       |
| Fa0/11 | 0          | 0         | 0        | 0          | 0         | 0     |
| 0      |            |           |          |            |           |       |
| Fa0/12 | 0          | 0         | 0        | 0          | 0         | 0     |
| 0      |            |           |          |            |           |       |
| Fa0/13 | 0          | 0         | 0        | 0          | 0         | 0     |
| 0      |            |           |          |            |           |       |
| Fa0/14 | 0          | 0         | 0        | 0          | 0         | 0     |
| 0      |            |           |          |            |           |       |
| Fa0/15 | 0          | 0         | 0        | 0          | 0         | 0     |
| 0      |            |           |          |            |           |       |
| Fa0/16 | 0          | 0         | 0        | 0          | 5         | 0     |
| 0      |            |           |          |            |           |       |
| Fa0/17 | 0          | 0         | 0        | 0          | 5         | 0     |
| 0      |            |           |          |            |           |       |
| Fa0/18 | 0          | 0         | 0        | 0          | 5         | 0     |
| 0      |            |           |          |            |           |       |
| Fa0/19 | 0          | 0         | 0        | 0          | 2         | 0     |
| 0      |            |           |          |            |           |       |
| Fa0/20 | 0          | 0         | 0        | 0          | 2         | 0     |
| 0      |            |           |          |            |           |       |
| Fa0/21 | 0          | 0         | 0        | 0          | 2         | 0     |
| 0      |            |           |          |            |           |       |
| Fa0/22 | 0          | 0         | 0        | 0          | 0         | 0     |
| 0      |            |           |          |            |           |       |
| Fa0/23 | 0          | 0         | 0        | 0          | 1         | 0     |
| 0      |            |           |          |            |           |       |
| Fa0/24 | 0          | 0         | 0        | 0          | 1         | 0     |
| 0      |            |           |          |            |           |       |
| Po1    | 0          | 0         | 0        | 0          | 0         | 0     |
| 0      |            |           |          |            |           |       |
| Po2    | 0          | 0         | 0        | 0          | 0         | 0     |
| 0      |            |           |          |            |           |       |

ASW2#

ASW2#show cdp neighbors

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

| Device ID    | Local Intrfce | Holdtme | Capability | Platform      | Port |
|--------------|---------------|---------|------------|---------------|------|
| DSW1<br>0/18 | Fas 0/18      | 162     | R S I      | Cisco WS-CFas |      |
| DSW1<br>0/16 | Fas 0/16      | 162     | R S I      | Cisco WS-CFas |      |
| DSW1<br>0/17 | Fas 0/17      | 162     | R S I      | Cisco WS-CFas |      |
| DSW2<br>0/18 | Fas 0/21      | 176     | R S I      | Cisco WS-CFas |      |
| DSW2<br>0/16 | Fas 0/19      | 176     | R S I      | Cisco WS-CFas |      |

DSW2                      Fas 0/20                      176                      R S I                      Cisco WS-CFas  
0/17  
ASW2#

ASW2#show cdp neighbors detail

-----  
Device ID: DSW1  
Entry address(es):  
  IP address: 10.2.1.1  
Platform: Cisco WS-C3550-24, Capabilities: Router Switch IGMP  
Interface: FastEthernet0/18, Port ID (outgoing port): FastEthernet0/18  
Holdtime : 155 sec

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

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

-----  
Device ID: DSW1  
Entry address(es):  
IP address: 10.2.1.1  
Platform: Cisco WS-C3550-24, Capabilities: Router Switch IGMP  
Interface: FastEthernet0/16, Port ID (outgoing port): FastEthernet0/16  
Holdtime : 155 sec

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

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

-----  
Device ID: DSW1  
Entry address(es):  
IP address: 10.2.1.1  
Platform: Cisco WS-C3550-24, Capabilities: Router Switch IGMP  
Interface: FastEthernet0/17, Port ID (outgoing port): FastEthernet0/17  
Holdtime : 153 sec

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

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

-----  
Device ID: DSW2  
Entry address(es):  
  IP address: 10.2.1.2  
Platform: Cisco WS-C3550-24-PWR, Capabilities: Router Switch IGMP  
Interface: FastEthernet0/21, Port ID (outgoing port): FastEthernet0/18  
Holdtime : 167 sec

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

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

-----  
Device ID: DSW2  
Entry address(es):  
  IP address: 10.2.1.2  
Platform: Cisco WS-C3550-24-PWR, Capabilities: Router Switch IGMP  
Interface: FastEthernet0/19, Port ID (outgoing port): FastEthernet0/16  
Holdtime : 166 sec

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

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

-----  
Device ID: DSW2  
Entry address(es):  
  IP address: 10.2.1.2  
Platform: Cisco WS-C3550-24-PWR, Capabilities: Router Switch IGMP  
Interface: FastEthernet0/20, Port ID (outgoing port): FastEthernet0/17  
Holdtime : 165 sec

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

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

ASW2#

ASW2#show arp

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

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



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

```
RTP/IP header compression is disabled
Probe proxy name replies are disabled
Policy routing is disabled
Network address translation is disabled
WCCP Redirect outbound is disabled
WCCP Redirect inbound is disabled
WCCP Redirect exclude is disabled
BGP Policy Mapping is disabled
ASW2#
```

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

```
0 window probe packets, 0 window update packets
0 dup ack packets, 0 ack packets with unsend data
0 ack packets (0 bytes)
Sent: 0 Total, 0 urgent packets
0 control packets (including 0 retransmitted)
0 data packets (0 bytes)
0 data packets (0 bytes) retransmitted
0 ack only packets (0 delayed)
0 window probe packets, 0 window update packets
0 Connections initiated, 0 connections accepted, 0 connections
established
0 Connections closed (including 0 dropped, 0 embryonic dropped)
0 Total rxmt timeout, 0 connections dropped in rxmt timeout
0 Keepalive timeout, 0 keepalive probe, 0 Connections dropped in
keepalive
ASW2#
```

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

ASW2#

ASW2#show vlan

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

```

1004 fddinet-default          act/unsup
1005 trbrf-default           act/unsup

```

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

```

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

```

Remote SPAN VLANs

```

Primary Secondary Type          Ports
-----

```

ASW2#

ASW2#show spanning-tree

VLAN0020

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

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

| Interface | Role  | Sts   | Cost  | Prio.Nbr | Type  |
|-----------|-------|-------|-------|----------|-------|
| -----     | ----- | ----- | ----- | -----    | ----- |
| -----     |       |       |       |          |       |
| 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        | disabled   | 20    | auto   | auto  |
| 10/100BaseTX |            |       |        |       |
| Fa0/9        | disabled   | 20    | auto   | auto  |
| 10/100BaseTX |            |       |        |       |
| Fa0/10       | disabled   | 20    | auto   | auto  |
| 10/100BaseTX |            |       |        |       |
| Fa0/11       | disabled   | 20    | auto   | auto  |
| 10/100BaseTX |            |       |        |       |
| Fa0/12       | disabled   | 20    | auto   | auto  |
| 10/100BaseTX |            |       |        |       |
| Fa0/13       | disabled   | 20    | auto   | auto  |
| 10/100BaseTX |            |       |        |       |
| Fa0/14       | disabled   | 20    | auto   | auto  |
| 10/100BaseTX |            |       |        |       |
| Fa0/15       | notconnect | 20    | auto   | auto  |
| 10/100BaseTX |            |       |        |       |
| Fa0/16       | connected  | trunk | a-full | a-100 |
| 10/100BaseTX |            |       |        |       |
| Fa0/17       | connected  | trunk | a-full | a-100 |
| 10/100BaseTX |            |       |        |       |
| Fa0/18       | connected  | trunk | a-full | a-100 |
| 10/100BaseTX |            |       |        |       |
| Fa0/19       | connected  | trunk | a-full | a-100 |
| 10/100BaseTX |            |       |        |       |
| Fa0/20       | connected  | trunk | a-full | a-100 |
| 10/100BaseTX |            |       |        |       |
| Fa0/21       | connected  | trunk | a-full | a-100 |
| 10/100BaseTX |            |       |        |       |
| Fa0/22       | notconnect | 1     | auto   | auto  |
| 10/100BaseTX |            |       |        |       |
| Fa0/23       | notconnect | 1     | auto   | auto  |
| 10/100BaseTX |            |       |        |       |
| Fa0/24       | notconnect | 1     | auto   | auto  |
| 10/100BaseTX |            |       |        |       |
| Po1          | connected  | trunk | a-full | a-100 |
| Po2          | connected  | trunk | a-full | a-100 |
| ASW2#        |            |       |        |       |



```
ASW2#show interfaces switchport
Name: Fa0/1
Switchport: Enabled
Administrative Mode: static access
Operational Mode: down
Administrative Trunking Encapsulation: dot1q
Negotiation of Trunking: Off
Access Mode VLAN: 20 (VLAN0020)
Trunking Native Mode VLAN: 1 (default)
Voice VLAN: none
Administrative private-vlan host-association: none
Administrative private-vlan mapping: none
Administrative private-vlan trunk native VLAN: none
Administrative private-vlan trunk encapsulation: dot1q
Administrative private-vlan trunk normal VLANs: none
Administrative private-vlan trunk private VLANs: none
Operational private-vlan: none
Trunking VLANs Enabled: ALL
Pruning VLANs Enabled: 2-1001
Capture Mode Disabled
Capture VLANs Allowed: ALL
Protected: false
Appliance trust: none
```

```
Name: Fa0/2
Switchport: Enabled
Administrative Mode: static access
Operational Mode: down
Administrative Trunking Encapsulation: dot1q
Negotiation of Trunking: Off
Access Mode VLAN: 20 (VLAN0020)
Trunking Native Mode VLAN: 1 (default)
Voice VLAN: none
Administrative private-vlan host-association: none
Administrative private-vlan mapping: none
```

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

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

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

Capture VLANs Allowed: ALL  
Protected: false  
Appliance trust: none

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

Name: Fa0/6  
Switchport: Enabled  
Administrative Mode: static access  
Operational Mode: down  
Administrative Trunking Encapsulation: dot1q  
Negotiation of Trunking: Off  
Access Mode VLAN: 20 (VLAN0020)  
Trunking Native Mode VLAN: 1 (default)  
Voice VLAN: none  
Administrative private-vlan host-association: none  
Administrative private-vlan mapping: none  
Administrative private-vlan trunk native VLAN: none  
Administrative private-vlan trunk encapsulation: dot1q  
Administrative private-vlan trunk normal VLANs: none  
Administrative private-vlan trunk private VLANs: none  
Operational private-vlan: none  
Trunking VLANs Enabled: ALL  
Pruning VLANs Enabled: 2-1001  
Capture Mode Disabled  
Capture VLANs Allowed: ALL  
Protected: false  
Appliance trust: none

Name: Fa0/7  
Switchport: Enabled  
Administrative Mode: static access  
Operational Mode: down

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

Name: Fa0/8  
Switchport: Enabled  
Administrative Mode: static access  
Operational Mode: down  
Administrative Trunking Encapsulation: dot1q  
Negotiation of Trunking: Off  
Access Mode VLAN: 20 (VLAN0020)  
Trunking Native Mode VLAN: 1 (default)  
Voice VLAN: none  
Administrative private-vlan host-association: none  
Administrative private-vlan mapping: none  
Administrative private-vlan trunk native VLAN: none  
Administrative private-vlan trunk encapsulation: dot1q  
Administrative private-vlan trunk normal VLANs: none  
Administrative private-vlan trunk private VLANs: none  
Operational private-vlan: none  
Trunking VLANs Enabled: ALL  
Pruning VLANs Enabled: 2-1001  
Capture Mode Disabled  
Capture VLANs Allowed: ALL  
Protected: false  
Appliance trust: none

Name: Fa0/9  
Switchport: Enabled  
Administrative Mode: static access  
Operational Mode: down  
Administrative Trunking Encapsulation: dot1q  
Negotiation of Trunking: Off  
Access Mode VLAN: 20 (VLAN0020)  
Trunking Native Mode VLAN: 1 (default)  
Voice VLAN: none  
Administrative private-vlan host-association: none  
Administrative private-vlan mapping: none  
Administrative private-vlan trunk native VLAN: none

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

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

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

Protected: false  
Appliance trust: none

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

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

Name: Fa0/14  
Switchport: Enabled  
Administrative Mode: static access  
Operational Mode: down  
Administrative Trunking Encapsulation: dot1q

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

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

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

Administrative private-vlan trunk encapsulation: dot1q  
Administrative private-vlan trunk normal VLANs: none  
Administrative private-vlan trunk private VLANs: none  
Operational private-vlan: none  
Trunking VLANs Enabled: 20,200  
Pruning VLANs Enabled: 2-1001  
Capture Mode Disabled  
Capture VLANs Allowed: ALL  
Protected: false  
Appliance trust: none

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

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



Capture Mode Disabled  
Capture VLANs Allowed: ALL  
Protected: false  
Appliance trust: none

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

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

Name: Fa0/21

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

Name: Fa0/22

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

Name: Fa0/23

Switchport: Enabled  
Administrative Mode: trunk  
Operational Mode: down  
Administrative Trunking Encapsulation: dot1q  
Negotiation of Trunking: On  
Access Mode VLAN: 1 (default)  
Trunking Native Mode VLAN: 1 (default)

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

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

Name: Po1  
Switchport: Enabled  
Administrative Mode: trunk  
Operational Mode: trunk  
Administrative Trunking Encapsulation: dot1q  
Operational Trunking Encapsulation: dot1q  
Negotiation of Trunking: On  
Access Mode VLAN: 1 (default)  
Trunking Native Mode VLAN: 1 (default)  
Voice VLAN: none  
Administrative private-vlan host-association: none  
Administrative private-vlan mapping: none  
Administrative private-vlan trunk native VLAN: none  
Administrative private-vlan trunk encapsulation: dot1q  
Administrative private-vlan trunk normal VLANs: none  
Administrative private-vlan trunk private VLANs: none

Operational private-vlan: none  
Trunking VLANs Enabled: 20,200  
Pruning VLANs Enabled: 2-1001  
Protected: false  
Appliance trust: none

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

```
ASW2#show interfaces trunk
```

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

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

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

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

```
ASW2#
```

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

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

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

```
Group: 1
-----
Group state = L2
Ports: 3    Maxports = 8
```

Port-channels: 1 Max Port-channels = 1  
Protocol: PAgP

Ports in the group:

-----  
Port: Fa0/19

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

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

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

d - PAgP is down.

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

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

Local information:

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

Partner's information:

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

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

-----  
Port: Fa0/20

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

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

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

d - PAgP is down.



Timers: H - Hello timer is running. Q - Quit timer is running.  
S - Switching timer is running. I - Interface timer is running.

Local information:

| Group | Port   | Flags | State | Timers | Interval | Count | Priority | Method |    |
|-------|--------|-------|-------|--------|----------|-------|----------|--------|----|
|       | Fa0/20 | SC    | U6/S7 | H      | 30s      | 1     | 128      | Any    | 27 |

Partner's information:

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

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

Port: Fa0/21

-----

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

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

Local information:

| Group | Port   | Flags | State | Timers | Interval | Count | Priority | 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 |
| Cap.  |         |           |         |         |       |

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

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

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

Port-channel: Po1  
-----

Age of the Port-channel = 0d:02h:09m:31s  
Logical slot/port = 1/0 Number of ports = 3  
GC = 0x00010001 HotStandBy port = null  
Port state = Port-channel Ag-Inuse  
Protocol = PAgP

Ports in the Port-channel:

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

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

Group: 2  
-----

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

Ports in the group:  
-----

Port: Fa0/16  
-----

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

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

Local information:

| Group | Port | Flags | State | Timers | Interval | Count | Priority | Method |    |
|-------|------|-------|-------|--------|----------|-------|----------|--------|----|
|       |      |       |       |        | 30s      | 1     | 128      | Any    | 28 |

Partner's information:

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

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

Port: Fa0/17

-----

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

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

Local information:

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

Partner's information:

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

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

Port: Fa0/18

-----

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

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

Local information:

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

Partner's information:

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

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

Port-channels in the group:

-----

Port-channel: Po2

-----

Age of the Port-channel = 0d:02h:09m:36s  
Logical slot/port = 1/1 Number of ports = 3  
GC = 0x00020001 HotStandBy port = null  
Port state = Port-channel Ag-Inuse  
Protocol = PAgP

Ports in the Port-channel:

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

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

```
ASW2#
```

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

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

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

```
ASW2#
```

ASW2#show spanning-tree summary

Switch is in pvst mode

Root bridge for: none

EtherChannel misconfig guard is enabled

Extended system ID is enabled

Portfast Default is disabled

PortFast BPDU Guard Default is disabled

Portfast BPDU Filter Default is disabled

Loopguard Default is disabled

UplinkFast is disabled

BackboneFast is disabled

Pathcost method used is short

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

ASW2#

```
ASW2#show uddl
```

```
Interface Fa0/1
```

```
---
```

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

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

```
Current bidirectional state: Unknown
```

```
Interface Fa0/2
```

```
---
```

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

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

```
Current bidirectional state: Unknown
```

```
Interface Fa0/3
```

```
---
```

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

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

```
Current bidirectional state: Unknown
```

```
Interface Fa0/4
```

---

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

Interface Fa0/5

---

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

Interface Fa0/6

---

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

Interface Fa0/7

---

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

Interface Fa0/8

---

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

Interface Fa0/9

---

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

Interface Fa0/10

---

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

Interface Fa0/11

---

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

Interface Fa0/12

---

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

Interface Fa0/13



---

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

Interface Fa0/14

---

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

Interface Fa0/15

---

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

Interface Fa0/16

---

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

Interface Fa0/17

---

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

Interface Fa0/18

---

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

Interface Fa0/19

---

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

Interface Fa0/20

---

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

Interface Fa0/21

---

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

Interface Fa0/22

---

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

Interface Fa0/23

---

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

Interface Fa0/24

---

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

ASW2#show etherchannel summary

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

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

| Group | Port-channel | Protocol | Ports     |            |           |
|-------|--------------|----------|-----------|------------|-----------|
| 1     | Po1(SU)      | PAgP     | Fa0/19(P) | Fa0/20(Pd) | Fa0/21(P) |
| 2     | Po2(SU)      | PAgP     | Fa0/16(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-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 |
|--------|-------|-------|--------|----------------|---------------|---------------|-----------------|
| Fa0/19 | 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:02h:08m:00s

Port: Fa0/20  
-----

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

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

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

Local information:

| Group | Port   | Flags | State | Timers | Interval | Count | Priority | Method |    |
|-------|--------|-------|-------|--------|----------|-------|----------|--------|----|
|       | Fa0/20 | SC    | U6/S7 | H      | 30s      | 1     | 128      | Any    | 27 |

Partner's information:

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

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

Port: Fa0/21

-----

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

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

Local information:

| Group | Port   | Flags | State | Timers | Interval | Count | Priority | 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  | 2s      | SC    |
| 180001 |         |                |         |         |       |

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

Group: 2

-----

Ports in the group:

-----

Port: Fa0/16

-----

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

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

Local information:

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

Partner's information:

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

E0001

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

Port: Fa0/17

-----

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

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

Local information:

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

Partner's information:

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

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

Port: Fa0/18

-----

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

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

Local information:

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

Partner's information:



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

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

ASW2#

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

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

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

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

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

```
Age of the Port-channel    = 0d:02h:10m:39s
Logical slot/port          = 1/0           Number of ports = 3
GC                          = 0x00010001   HotStandBy port = null
Port state                  = Port-channel Ag-Inuse
Protocol                    = PAgP
```

```
Ports in the Port-channel:
```

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

```

0      00      Fa0/19  Desirable-S1      0
0      00      Fa0/20  Desirable-S1      0
0      00      Fa0/21  Desirable-S1      0

```

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

Group: 2

-----

Port-channels in the group:

-----

Port-channel: Po2

-----

```

Age of the Port-channel   = 0d:02h:10m:40s
Logical slot/port        = 1/1           Number of ports = 3
GC                        = 0x00020001   HotStandBy port = null
Port state                = Port-channel Ag-Inuse
Protocol                  = PAgP

```

Ports in the Port-channel:

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

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

Time since last port Un-bundled: 0d:01h:12m:47s Fa0/18

ASW2#

ASW2#show pagp neighbor

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

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

Channel group 1 neighbors

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

Channel group 2 neighbors

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

ASW2#

```
ASW2#show lacp neighbor
```

```
ASW2#
```

ASW2#show port-security

| Secure Port | MaxSecureAddr | CurrentAddr | SecurityViolation | Security |
|-------------|---------------|-------------|-------------------|----------|
| Action      | (Count)       | (Count)     | (Count)           |          |

---

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

---

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

ASW2#

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

```
-----  
Vlan    Mac Address          Type                Ports    Remaining Age  
-----  
-----  
-----  
-----  
-----  
-----  
-----  
-----  
-----  
-----  
-----
```

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

```
ASW2#
```