

```
ASW1#
ASW1#show running-config
Building configuration...

Current configuration : 3672 bytes
!
version 12.1
no service pad
service timestamps debug uptime
service timestamps log uptime
no service password-encryption
!
hostname ASW1
!
!
ip subnet-zero
!
vtp domain netlearning
vtp mode transparent
!
!
spanning-tree mode pvst
no spanning-tree optimize bpdu transmission
spanning-tree extend system-id
spanning-tree vlan 10 priority 61440
!
!
!
!
vlan 10,20,100,200
!
interface Port-channel1
 switchport trunk allowed vlan 200
 switchport mode trunk
 flowcontrol send off
!
interface Port-channel2
 switchport trunk allowed vlan 200
 switchport mode trunk
 flowcontrol send off
!
interface FastEthernet0/1
 switchport access vlan 10
 switchport mode access
 switchport port-security
 spanning-tree portfast
!
interface FastEthernet0/2
 switchport access vlan 10
 switchport mode access
 switchport port-security
 spanning-tree portfast
!
```

```
interface FastEthernet0/3
  switchport access vlan 10
  switchport mode access
  switchport port-security
  spanning-tree portfast
!
interface FastEthernet0/4
  switchport access vlan 10
  switchport mode access
  switchport port-security
  spanning-tree portfast
!
interface FastEthernet0/5
  switchport access vlan 10
  switchport mode access
  switchport port-security
  spanning-tree portfast
!
interface FastEthernet0/6
  switchport access vlan 10
  switchport mode access
  switchport port-security
  spanning-tree portfast
!
interface FastEthernet0/7
  switchport access vlan 10
  switchport mode access
  switchport port-security
  spanning-tree portfast
!
interface FastEthernet0/8
  switchport access vlan 10
  switchport mode access
  switchport port-security
  spanning-tree portfast
!
interface FastEthernet0/9
  switchport access vlan 10
  switchport mode access
  switchport port-security
  spanning-tree portfast
!
interface FastEthernet0/10
  switchport access vlan 10
  switchport mode access
  switchport port-security
  spanning-tree portfast
!
interface FastEthernet0/11
  switchport access vlan 10
  switchport mode access
  switchport port-security
  spanning-tree portfast
!
```

```
interface FastEthernet0/12
  switchport access vlan 10
  switchport mode access
  switchport port-security
  spanning-tree portfast
!
interface FastEthernet0/13
  switchport access vlan 10
  switchport mode access
  switchport port-security
  spanning-tree portfast
!
interface FastEthernet0/14
  switchport access vlan 10
  switchport mode access
  switchport port-security
  spanning-tree portfast
!
interface FastEthernet0/15
  switchport access vlan 10
  switchport mode access
  switchport port-security
  spanning-tree portfast
!
interface FastEthernet0/16
  switchport trunk allowed vlan 200
  switchport mode trunk
  channel-group 2 mode active
!
interface FastEthernet0/17
  switchport trunk allowed vlan 200
  switchport mode trunk
  channel-group 2 mode active
!
interface FastEthernet0/18
  switchport trunk allowed vlan 200
  switchport mode trunk
  channel-group 2 mode active
!
interface FastEthernet0/19
  switchport trunk allowed vlan 200
  switchport mode trunk
  channel-group 1 mode passive
!
interface FastEthernet0/20
  switchport trunk allowed vlan 200
  switchport mode trunk
  channel-group 1 mode passive
!
interface FastEthernet0/21
  switchport trunk allowed vlan 200
  switchport mode trunk
  channel-group 1 mode passive
!
```

```
interface FastEthernet0/22
  switchport mode trunk
  shutdown
!
interface FastEthernet0/23
  switchport mode trunk
  shutdown
!
interface FastEthernet0/24
  switchport mode trunk
  shutdown
!
interface Vlan1
  no ip address
  no ip route-cache
  shutdown
!
interface Vlan200
  ip address 192.168.1.131 255.255.255.224
  no ip route-cache
!
ip http server
!
line con 0
  exec-timeout 0 0
  logging synchronous
line vty 0 4
  login
line vty 5 15
  login
!
!
end
```

ASW1#

```
ASW1#show ip interface brief
```

Interface	IP-Address	OK?	Method	Status
Protocol				
Vlan1	unassigned	YES	NVRAM	administratively
down down				
Vlan200	192.168.1.131	YES	NVRAM	up
up				
FastEthernet0/1	unassigned	YES	unset	up
up				
FastEthernet0/2	unassigned	YES	unset	down
down				
FastEthernet0/3	unassigned	YES	unset	down
down				
FastEthernet0/4	unassigned	YES	unset	down
down				
FastEthernet0/5	unassigned	YES	unset	down
down				
FastEthernet0/6	unassigned	YES	unset	down
down				
FastEthernet0/7	unassigned	YES	unset	down
down				
FastEthernet0/8	unassigned	YES	unset	down
down				
FastEthernet0/9	unassigned	YES	unset	down
down				
FastEthernet0/10	unassigned	YES	unset	down
down				
FastEthernet0/11	unassigned	YES	unset	down
down				

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

ASW1#









```
ASW1#show interfaces
Vlan1 is administratively down, line protocol is down
  Hardware is CPU Interface, address is 0015.faac.46c0 (bia
0015.faac.46c0)
  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.faac.46c0 (bia
0015.faac.46c0)
  Internet address is 192.168.1.131/27
  MTU 1500 bytes, BW 1000000 Kbit, DLY 10 usec,
    reliability 255/255, txload 1/255, rxload 1/255
  Encapsulation ARPA, loopback not set
  ARP type: ARPA, ARP Timeout 04:00:00
```

```
Last input 00:38:59, 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 2000 bits/sec, 4 packets/sec
5 minute output rate 1000 bits/sec, 2 packets/sec
  28297 packets input, 2342974 bytes, 0 no buffer
  Received 2 broadcasts (0 IP multicast)
  0 runts, 0 giants, 0 throttles
  0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
  28422 packets output, 13537749 bytes, 0 underruns
  0 output errors, 2 interface resets
  0 output buffer failures, 0 output buffers swapped out
FastEthernet0/1 is up, line protocol is up (connected)
  Hardware is Fast Ethernet, address is 0015.faac.46c1 (bia
0015.faac.46c1)
  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 00:27:21, 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
    4599 packets input, 508708 bytes, 0 no buffer
    Received 3480 broadcasts (0 multicast)
    0 runts, 0 giants, 0 throttles
    0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
    0 watchdog, 2274 multicast, 0 pause input
    0 input packets with dribble condition detected
    15475 packets output, 1127548 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 down, line protocol is down (notconnect)
  Hardware is Fast Ethernet, address is 0015.faac.46c2 (bia
0015.faac.46c2)
  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 02:49:29, output hang never
  Last clearing of "show interface" counters never
```

```
Input queue: 0/75/0/0 (size/max/drops/flushes); Total output drops: 0
Queueing strategy: fifo
Output queue: 0/40 (size/max)
5 minute input rate 0 bits/sec, 0 packets/sec
5 minute output rate 0 bits/sec, 0 packets/sec
  1 packets input, 64 bytes, 0 no buffer
  Received 0 broadcasts (0 multicast)
  0 runts, 0 giants, 0 throttles
  0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
  0 watchdog, 0 multicast, 0 pause input
  0 input packets with dribble condition detected
  1 packets output, 64 bytes, 0 underruns
  0 output errors, 0 collisions, 2 interface resets
  0 babbles, 0 late collision, 0 deferred
  0 lost carrier, 0 no carrier, 0 PAUSE output
  0 output buffer failures, 0 output buffers swapped out
FastEthernet0/3 is down, line protocol is down (notconnect)
  Hardware is Fast Ethernet, address is 0015.faac.46c3 (bia
0015.faac.46c3)
  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 02:49:31, 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 down, line protocol is down (notconnect)
  Hardware is Fast Ethernet, address is 0015.faac.46c4 (bia
0015.faac.46c4)
  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 02:49:32, output hang never
Last clearing of "show interface" counters never
Input queue: 0/75/0/0 (size/max/drops/flushes); Total output drops: 0
Queueing strategy: fifo
Output queue: 0/40 (size/max)
5 minute input rate 0 bits/sec, 0 packets/sec
5 minute output rate 0 bits/sec, 0 packets/sec
  1 packets input, 64 bytes, 0 no buffer
  Received 0 broadcasts (0 multicast)
  0 runts, 0 giants, 0 throttles
  0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
  0 watchdog, 0 multicast, 0 pause input
  0 input packets with dribble condition detected
  1 packets output, 64 bytes, 0 underruns
  0 output errors, 0 collisions, 2 interface resets
  0 babbles, 0 late collision, 0 deferred
  0 lost carrier, 0 no carrier, 0 PAUSE output
  0 output buffer failures, 0 output buffers swapped out
FastEthernet0/5 is down, line protocol is down (notconnect)
  Hardware is Fast Ethernet, address is 0015.faac.46c5 (bia
0015.faac.46c5)
  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 02:49:34, 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 down, line protocol is down (notconnect)
  Hardware is Fast Ethernet, address is 0015.faac.46c6 (bia
0015.faac.46c6)
  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 02:49:35, 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
FastEthernet0/7 is down, line protocol is down (notconnect)
  Hardware is Fast Ethernet, address is 0015.faac.46c7 (bia
0015.faac.46c7)
  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 02:49:37, 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
FastEthernet0/8 is down, line protocol is down (notconnect)
  Hardware is Fast Ethernet, address is 0015.faac.46c8 (bia
0015.faac.46c8)
  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 02:49:38, 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
FastEthernet0/9 is down, line protocol is down (notconnect)
  Hardware is Fast Ethernet, address is 0015.faac.46c9 (bia
0015.faac.46c9)
  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 02:49:40, 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
FastEthernet0/10 is down, line protocol is down (notconnect)
  Hardware is Fast Ethernet, address is 0015.faac.46ca (bia
0015.faac.46ca)
  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 02:49:41, output hang never
Last clearing of "show interface" counters never
Input queue: 0/75/0/0 (size/max/drops/flushes); Total output drops: 0
Queueing strategy: fifo
Output queue: 0/40 (size/max)
5 minute input rate 0 bits/sec, 0 packets/sec
5 minute output rate 0 bits/sec, 0 packets/sec
    1 packets input, 64 bytes, 0 no buffer
    Received 0 broadcasts (0 multicast)
    0 runts, 0 giants, 0 throttles
    0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
    0 watchdog, 0 multicast, 0 pause input
    0 input packets with dribble condition detected
    1 packets output, 64 bytes, 0 underruns
    0 output errors, 0 collisions, 2 interface resets
    0 babbles, 0 late collision, 0 deferred
    0 lost carrier, 0 no carrier, 0 PAUSE output
    0 output buffer failures, 0 output buffers swapped out
FastEthernet0/11 is down, line protocol is down (notconnect)
    Hardware is Fast Ethernet, address is 0015.faac.46cb (bia
0015.faac.46cb)
    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 02:49:43, 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
FastEthernet0/12 is down, line protocol is down (notconnect)
```



Hardware is Fast Ethernet, address is 0015.faac.46cc (bia 0015.faac.46cc)  
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 02:49:44, 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 down, line protocol is down (notconnect)  
Hardware is Fast Ethernet, address is 0015.faac.46cd (bia 0015.faac.46cd)

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 02:49:46, 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  
FastEthernet0/14 is down, line protocol is down (notconnect)  
Hardware is Fast Ethernet, address is 0015.faac.46ce (bia 0015.faac.46ce)  
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 02:49:48, 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

FastEthernet0/15 is down, line protocol is down (notconnect)  
Hardware is Fast Ethernet, address is 0015.faac.46cf (bia 0015.faac.46cf)  
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 02:49:49, 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
FastEthernet0/16 is up, line protocol is up (connected)
  Hardware is Fast Ethernet, address is 0015.faac.46d0 (bia
0015.faac.46d0)
  MTU 1500 bytes, BW 100000 Kbit, DLY 100 usec,
    reliability 255/255, txload 1/255, rxload 1/255
  Encapsulation ARPA, loopback not set
  Keepalive set (10 sec)
  Full-duplex, 100Mb/s, media type is 100BaseTX
  input flow-control is unsupported output flow-control is unsupported
  ARP type: ARPA, ARP Timeout 04:00:00
  Last input 00:00:01, output 00:00:01, output hang never
  Last clearing of "show interface" counters never
  Input queue: 0/75/0/0 (size/max/drops/flushes); Total output drops: 0
  Queueing strategy: fifo
  Output queue: 0/40 (size/max)
  5 minute input rate 0 bits/sec, 0 packets/sec
  5 minute output rate 0 bits/sec, 0 packets/sec
    7136 packets input, 602261 bytes, 0 no buffer
    Received 6035 broadcasts (0 multicast)
    0 runts, 0 giants, 0 throttles
    0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
    0 watchdog, 6013 multicast, 0 pause input
    0 input packets with dribble condition detected
    18027 packets output, 1440309 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.faac.46d1 (bia
0015.faac.46d1)
  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 00:00:03, 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
    2163 packets input, 226588 bytes, 0 no buffer
    Received 875 broadcasts (0 multicast)
    0 runts, 0 giants, 0 throttles
    0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
    0 watchdog, 875 multicast, 0 pause input
    0 input packets with dribble condition detected
```

```
    2078 packets output, 223096 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.faac.46d2 (bia
0015.faac.46d2)
  MTU 1500 bytes, BW 100000 Kbit, DLY 100 usec,
    reliability 255/255, txload 1/255, rxload 1/255
  Encapsulation ARPA, loopback not set
  Keepalive set (10 sec)
  Full-duplex, 100Mb/s, media type is 100BaseTX
  input flow-control is unsupported output flow-control is unsupported
  ARP type: ARPA, ARP Timeout 04:00:00
  Last input 00:00:02, output 00:00:04, 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
    2480 packets input, 245262 bytes, 0 no buffer
    Received 1474 broadcasts (0 multicast)
    0 runts, 0 giants, 0 throttles
    0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
    0 watchdog, 1474 multicast, 0 pause input
    0 input packets with dribble condition detected
    2029 packets output, 218703 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.faac.46d3 (bia
0015.faac.46d3)
  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 00:00:18, output 00:00:06, output hang never
  Last clearing of "show interface" counters never
  Input queue: 1/75/0/0 (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
    8545 packets input, 710242 bytes, 0 no buffer
    Received 7003 broadcasts (0 multicast)
    0 runts, 0 giants, 0 throttles
    0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
```

```
0 watchdog, 6973 multicast, 0 pause input
0 input packets with dribble condition detected
8029 packets output, 730212 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.faac.46d4 (bia
0015.faac.46d4)
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 00:00:04, 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
  12049 packets input, 932524 bytes, 0 no buffer
  Received 11022 broadcasts (0 multicast)
  0 runts, 0 giants, 0 throttles
  0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
  0 watchdog, 11023 multicast, 0 pause input
  0 input packets with dribble condition detected
  1948 packets output, 210966 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.faac.46d5 (bia
0015.faac.46d5)
MTU 1500 bytes, BW 100000 Kbit, DLY 100 usec,
  reliability 255/255, txload 1/255, rxload 1/255
Encapsulation ARPA, loopback not set
Keepalive set (10 sec)
Full-duplex, 100Mb/s, media type is 100BaseTX
input flow-control is unsupported output flow-control is unsupported
ARP type: ARPA, ARP Timeout 04:00:00
Last input 00:00:13, output 00:00:02, output hang never
Last clearing of "show interface" counters never
Input queue: 0/75/0/0 (size/max/drops/flushes); Total output drops: 0
Queueing strategy: fifo
Output queue: 0/40 (size/max)
5 minute input rate 0 bits/sec, 0 packets/sec
5 minute output rate 0 bits/sec, 0 packets/sec
  2018 packets input, 212808 bytes, 0 no buffer
  Received 878 broadcasts (0 multicast)
```

```
0 runts, 0 giants, 0 throttles
0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
0 watchdog, 877 multicast, 0 pause input
0 input packets with dribble condition detected
2970 packets output, 304381 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 administratively down, line protocol is down
(disabled)
  Hardware is Fast Ethernet, address is 0015.faac.46d6 (bia
0015.faac.46d6)
  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 02:50:00, output hang never
  Last clearing of "show interface" counters never
  Input queue: 0/75/0/0 (size/max/drops/flushes); Total output drops: 0
  Queueing strategy: fifo
  Output queue: 0/40 (size/max)
  5 minute input rate 0 bits/sec, 0 packets/sec
  5 minute output rate 0 bits/sec, 0 packets/sec
    1 packets input, 64 bytes, 0 no buffer
  Received 0 broadcasts (0 multicast)
    0 runts, 0 giants, 0 throttles
    0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
    0 watchdog, 0 multicast, 0 pause input
    0 input packets with dribble condition detected
    1 packets output, 64 bytes, 0 underruns
    0 output errors, 0 collisions, 2 interface resets
    0 babbles, 0 late collision, 0 deferred
    0 lost carrier, 0 no carrier, 0 PAUSE output
    0 output buffer failures, 0 output buffers swapped out
FastEthernet0/23 is administratively down, line protocol is down
(disabled)
  Hardware is Fast Ethernet, address is 0015.faac.46d7 (bia
0015.faac.46d7)
  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 02:50:02, output hang never
  Last clearing of "show interface" counters never
  Input queue: 0/75/0/0 (size/max/drops/flushes); Total output drops: 0
  Queueing strategy: fifo
  Output queue: 0/40 (size/max)
```

```
5 minute input rate 0 bits/sec, 0 packets/sec
5 minute output rate 0 bits/sec, 0 packets/sec
  1 packets input, 64 bytes, 0 no buffer
  Received 0 broadcasts (0 multicast)
  0 runts, 0 giants, 0 throttles
  0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
  0 watchdog, 0 multicast, 0 pause input
  0 input packets with dribble condition detected
  1 packets output, 64 bytes, 0 underruns
  0 output errors, 0 collisions, 2 interface resets
  0 babbles, 0 late collision, 0 deferred
  0 lost carrier, 0 no carrier, 0 PAUSE output
  0 output buffer failures, 0 output buffers swapped out
FastEthernet0/24 is administratively down, line protocol is down
(disabled)
  Hardware is Fast Ethernet, address is 0015.faac.46d8 (bia
0015.faac.46d8)
  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 02:50:03, output hang never
  Last clearing of "show interface" counters never
  Input queue: 0/75/0/0 (size/max/drops/flushes); Total output drops: 0
  Queueing strategy: fifo
  Output queue: 0/40 (size/max)
5 minute input rate 0 bits/sec, 0 packets/sec
5 minute output rate 0 bits/sec, 0 packets/sec
  1 packets input, 64 bytes, 0 no buffer
  Received 0 broadcasts (0 multicast)
  0 runts, 0 giants, 0 throttles
  0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
  0 watchdog, 0 multicast, 0 pause input
  0 input packets with dribble condition detected
  1 packets output, 64 bytes, 0 underruns
  0 output errors, 0 collisions, 2 interface resets
  0 babbles, 0 late collision, 0 deferred
  0 lost carrier, 0 no carrier, 0 PAUSE output
  0 output buffer failures, 0 output buffers swapped out
Port-channel1 is up, line protocol is up (connected)
  Hardware is EtherChannel, address is 0015.faac.46d5 (bia
0015.faac.46d5)
  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 00:00:00, output 00:02:39, 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
  22613 packets input, 1855122 bytes, 0 no buffer
  Received 18905 broadcasts (0 multicast)
  0 runts, 0 giants, 0 throttles
  0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
  0 watchdog, 18873 multicast, 0 pause input
  0 input packets with dribble condition detected
  12758 packets output, 1225905 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.faac.46d1 (bia
0015.faac.46d1)
  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, 1 packets/sec
  5 minute output rate 1000 bits/sec, 2 packets/sec
    11772 packets input, 1072931 bytes, 0 no buffer
    Received 8373 broadcasts (0 multicast)
    0 runts, 0 giants, 0 throttles
    0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
    0 watchdog, 8352 multicast, 0 pause input
    0 input packets with dribble condition detected
    21683 packets output, 1836626 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
ASW1#
```



```
ASW1#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	1	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	2	0
0						
Fa0/17	0	0	0	0	2	0
0						
Fa0/18	0	0	0	0	2	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	1	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						
ASW1#						

```
ASW1#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 ID					
DSW1 0/20	Fas 0/20	139	R S I	Cisco WS-CFas	
DSW1 0/21	Fas 0/21	139	R S I	Cisco WS-CFas	
DSW1 0/19	Fas 0/19	137	R S I	Cisco WS-CFas	
DSW2 0/21	Fas 0/18	126	R S I	Cisco WS-CFas	
DSW2 0/20	Fas 0/17	126	R S I	Cisco WS-CFas	
DSW2 0/19	Fas 0/16	124	R S I	Cisco WS-CFas	

```
ASW1#
```

```
ASW1#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: FastEthernet0/20, Port ID (outgoing port): FastEthernet0/20  
Holdtime : 135 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=00000000FFFFFFFFF0102250D0000000000000000DBDE36E00FF0000  
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: FastEthernet0/21, Port ID (outgoing port): FastEthernet0/21  
Holdtime : 135 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=00000000FFFFFFFFF0102250D0000000000000000DBDE36E00FF0000  
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: FastEthernet0/19, Port ID (outgoing port): FastEthernet0/19  
Holdtime : 132 sec

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

advertisement version: 2  
Protocol Hello: OUI=0x00000C, Protocol ID=0x0112; payload len=27,  
value=00000000FFFFFFFFF0102250D0000000000000000DBDE36E00FF0000  
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: FastEthernet0/18, Port ID (outgoing port): FastEthernet0/21  
Holdtime : 120 sec

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

advertisement version: 2  
Protocol Hello: OUI=0x00000C, Protocol ID=0x0112; payload len=27,  
value=00000000FFFFFFFFF010225170000000000000000BFD20BA00FF0000  
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: FastEthernet0/17, Port ID (outgoing port): FastEthernet0/20  
Holdtime : 119 sec

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

advertisement version: 2  
Protocol Hello: OUI=0x00000C, Protocol ID=0x0112; payload len=27,  
value=00000000FFFFFFFFF010225170000000000000000BFD20BA00FF0000  
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: FastEthernet0/16, Port ID (outgoing port): FastEthernet0/19  
Holdtime : 117 sec

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

advertisement version: 2  
Protocol Hello: OUI=0x00000C, Protocol ID=0x0112; payload len=27,  
value=00000000FFFFFFFFF010225170000000000000000BFD20BA00FF0000  
VTP Management Domain: 'netlearning'  
Native VLAN: 1  
Duplex: full  
Management address(es):  
IP address: 10.2.1.2

ASW1#

```
ASW1#show arp
Protocol Address           Age (min)  Hardware Addr   Type   Interface
Internet 192.168.1.131          -          0015.faac.46c0  ARPA   Vlan200
ASW1#
```



```
ASW1#show ip arp
Protocol Address           Age (min)  Hardware Addr   Type   Interface
Internet 192.168.1.131        -          0015.faac.46c0  ARPA   Vlan200
ASW1#
```

```
ASW1#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 192.168.1.131/27
  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
ASW1#
```

```
ASW1#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  
ASW1#

```
ASW1#show access-lists
```

```
ASW1#
```

```
ASW1#show vlan
```

VLAN Name	Status	Ports
1 default	active	Fa0/22, Fa0/23, Fa0/24

```

10  VLAN0010          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

20  VLAN0020          active
100 VLAN0100          active
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
100	enet	100100	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
-----	-----	-----	-----
-----	-----	-----	-----

ASW1#

ASW1#show spanning-tree

VLAN0010

Spanning tree enabled protocol ieee

Root ID      Priority      61450  
Address      0015.faac.46c0  
This bridge is the root  
Hello Time    2 sec    Max Age 20 sec    Forward Delay 15 sec

Bridge ID    Priority      61450 (priority 61440 sys-id-ext 10)  
Address      0015.faac.46c0  
Hello Time    2 sec    Max Age 20 sec    Forward Delay 15 sec  
Aging Time    300

Interface	Role	Sts	Cost	Prio.Nbr	Type
-----	-----	-----	-----	-----	-----
----					
Fa0/1	Desg	FWD	19	128.1	Edge P2p

VLAN0200

Spanning tree enabled protocol ieee

Root ID      Priority      4296  
          Address      000d.bde3.6e00  
          Cost            9  
          Port            65 (Port-channell)  
          Hello Time    2 sec    Max Age 20 sec    Forward Delay 15 sec

Bridge ID    Priority      32968 (priority 32768 sys-id-ext 200)  
          Address      0015.faac.46c0  
          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

ASW1#



ASW1#show interfaces status

Port	Name	Status	Vlan	Duplex	Speed	Type
Fa0/1		connected	10	a-full	a-100	
10/100BaseTX						
Fa0/2		notconnect	10	auto	auto	
10/100BaseTX						
Fa0/3		notconnect	10	auto	auto	
10/100BaseTX						
Fa0/4		notconnect	10	auto	auto	
10/100BaseTX						
Fa0/5		notconnect	10	auto	auto	
10/100BaseTX						
Fa0/6		notconnect	10	auto	auto	
10/100BaseTX						
Fa0/7		notconnect	10	auto	auto	
10/100BaseTX						
Fa0/8		notconnect	10	auto	auto	
10/100BaseTX						
Fa0/9		notconnect	10	auto	auto	
10/100BaseTX						
Fa0/10		notconnect	10	auto	auto	
10/100BaseTX						
Fa0/11		notconnect	10	auto	auto	
10/100BaseTX						
Fa0/12		notconnect	10	auto	auto	
10/100BaseTX						
Fa0/13		notconnect	10	auto	auto	
10/100BaseTX						
Fa0/14		notconnect	10	auto	auto	
10/100BaseTX						
Fa0/15		notconnect	10	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	disabled	1	auto	auto
10/100BaseTX				
Fa0/23	disabled	1	auto	auto
10/100BaseTX				
Fa0/24	disabled	1	auto	auto
10/100BaseTX				
Po1	connected	trunk	a-full	a-100
Po2	connected	trunk	a-full	a-100
ASW1#				

```
ASW1#show interfaces switchport
Name: Fa0/1
```

Switchport: Enabled  
Administrative Mode: static access  
Operational Mode: static access  
Administrative Trunking Encapsulation: dot1q  
Operational Trunking Encapsulation: native  
Negotiation of Trunking: Off  
Access Mode VLAN: 10 (VLAN0010)  
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: 10 (VLAN0010)  
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: 10 (VLAN0010)  
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: 10 (VLAN0010)  
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: 10 (VLAN0010)  
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: 10 (VLAN0010)  
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: 10 (VLAN0010)  
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: 10 (VLAN0010)  
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: 10 (VLAN0010)  
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: 10 (VLAN0010)  
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: 10 (VLAN0010)  
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: 10 (VLAN0010)  
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: 10 (VLAN0010)  
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: 10 (VLAN0010)  
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: 10 (VLAN0010)  
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: 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: 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: 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: 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: 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: 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: 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: 200
Pruning VLANs Enabled: 2-1001
Protected: false
Appliance trust: none
ASW1#
```

```
ASW1#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	200
Po2	200

Port Vlans allowed and active in management domain

Po1	200
Po2	200

Port Vlans in spanning tree forwarding state and not pruned

Po1	200
Po2	200

ASW1#

```
ASW1#show vtp status
VTP Version                : 2
Configuration Revision     : 0
Maximum VLANs supported locally : 64
Number of existing VLANs   : 9
VTP Operating Mode        : Transparent
VTP Domain Name           : netlearning
VTP Pruning Mode          : Disabled
VTP V2 Mode               : Enabled
VTP Traps Generation      : Disabled
MD5 digest                 : 0x76 0x8E 0xDC 0x90 0x2C 0x42 0xD3 0x04
Configuration last modified by 192.168.1.131 at 0-0-00 00:00:00
ASW1#
```



```
ASW1#show vtp password
VTP Password: cisco
ASW1#
```

```
ASW1#show etherchannel detail
Channel-group listing:
```

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

Group state = L2  
Ports: 3 Maxports = 16  
Port-channels: 1 Max Port-channels = 16  
Protocol: LACP

Ports in the group:  
-----

Port: Fa0/19  
-----

Port state = Up Mstr In-Bndl  
Channel group = 1 Mode = Passive Gcchange = -  
Port-channel = Po1 GC = - Pseudo port-channel =  
Po1  
Port index = 0 Load = 0x00 Protocol = LACP

Flags: S - Device is sending Slow LACPDUs F - Device is sending fast  
LACPDUs.  
A - Device is in active mode. P - Device is in passive  
mode.

Local information:

Port	Flags	State	LACP port Priority	Admin Key	Oper Key	Port Number	Port
Fa0/19	SP	bndl	32768	0x1	0x1	0x13	0x3C

Partner's information:

Port	Flags	LACP port Priority	Dev ID	Age	Oper Key	Port Number	Port State
Fa0/19	SA	32768	000d.bde3.6e00	20s	0xD	0x10	0x3D

Age of the port in the current state: 0d:02h:50m:38s

Port: Fa0/20  
-----

Port state = Up Mstr In-Bndl  
Channel group = 1 Mode = Passive Gcchange = -  
Port-channel = Po1 GC = - Pseudo port-channel =  
Po1  
Port index = 0 Load = 0x00 Protocol = LACP

Flags: S - Device is sending Slow LACPDUs F - Device is sending fast  
LACPDUs.  
A - Device is in active mode. P - Device is in passive  
mode.

Local information:

LACP port	Admin	Oper	Port	Port
-----------	-------	------	------	------

Port State	Flags	State	Priority	Key	Key	Number	
Fa0/20	SP	bndl	32768	0x1	0x1	0x14	0x3C

Partner's information:

Port	Flags	LACP port Priority	Dev ID	Age	Oper Key	Port Number	Port State
Fa0/20	SA	32768	000d.bde3.6e00	3s	0xD	0x11	0x3D

Age of the port in the current state: 0d:02h:50m:39s

Port: Fa0/21

-----

Port state = Up Mstr In-Bndl  
Channel group = 1 Mode = Passive Gcchange = -  
Port-channel = Po1 GC = - Pseudo port-channel = Po1  
Port index = 0 Load = 0x00 Protocol = LACP

Flags: S - Device is sending Slow LACPDU's F - Device is sending fast LACPDU's.  
A - Device is in active mode. P - Device is in passive mode.

Local information:

Port State	Flags	State	LACP port Priority	Admin Key	Oper Key	Port Number	Port
Fa0/21	SP	bndl	32768	0x1	0x1	0x15	0x3C

Partner's information:

Port	Flags	LACP port Priority	Dev ID	Age	Oper Key	Port Number	Port State
Fa0/21	SA	32768	000d.bde3.6e00	10s	0xD	0x12	0x3D

Age of the port in the current state: 0d:02h:50m:41s

Port-channels in the group:

-----

Port-channel: Po1 (Primary Aggregator)

-----

Age of the Port-channel = 0d:02h:52m:13s  
Logical slot/port = 1/0 Number of ports = 3  
HotStandBy port = null  
Port state = Port-channel Ag-Inuse  
Protocol = LACP

Ports in the Port-channel:

Index	Load	Port	EC state	No of bits
0	00	Fa0/19	Passive	0
0	00	Fa0/20	Passive	0
0	00	Fa0/21	Passive	0

Time since last port bundled: 0d:02h:50m:42s Fa0/19

Group: 2

-----  
 Group state = L2  
 Ports: 3 Maxports = 16  
 Port-channels: 1 Max Port-channels = 16  
 Protocol: LACP

Ports in the group:

-----  
 Port: Fa0/16

-----  
 Port state = Up Mstr In-Bndl  
 Channel group = 2 Mode = Active Gcchange = -  
 Port-channel = Po2 GC = - Pseudo port-channel =  
 Po2  
 Port index = 0 Load = 0x00 Protocol = LACP

Flags: S - Device is sending Slow LACPDUs F - Device is sending fast LACPDUs.  
 A - Device is in active mode. P - Device is in passive mode.

Local information:

Port	Flags	State	LACP port Priority	Admin Key	Oper Key	Port Number	Port
Fa0/16	SA	bndl	32768	0x2	0x2	0x10	0x3D

Partner's information:

Port	Flags	LACP port Priority	Dev ID	Age	Oper Key	Port Number	Port State
Fa0/16	SA	32768	000b.fd20.ba00	1s	0x17	0x10	0x3D

Age of the port in the current state: 0d:02h:49m:53s

Port: Fa0/17

-----  
 Port state = Up Mstr In-Bndl  
 Channel group = 2 Mode = Active Gcchange = -  
 Port-channel = Po2 GC = - Pseudo port-channel =  
 Po2  
 Port index = 0 Load = 0x00 Protocol = LACP

Flags: S - Device is sending Slow LACPDUs F - Device is sending fast LACPDUs.  
A - Device is in active mode. P - Device is in passive mode.

Local information:

Port	Flags	State	LACP port Priority	Admin Key	Oper Key	Port Number	Port State
Fa0/17	SA	bndl	32768	0x2	0x2	0x11	0x3D

Partner's information:

Port	Flags	LACP port Priority	Dev ID	Age	Oper Key	Port Number	Port State
Fa0/17	SA	32768	000b.fd20.ba00	4s	0x17	0x11	0x3D

Age of the port in the current state: 0d:02h:49m:55s

Port: Fa0/18

-----

Port state = Up Mstr In-Bndl  
Channel group = 2 Mode = Active Gcchange = -  
Port-channel = Po2 GC = - Pseudo port-channel =  
Po2  
Port index = 0 Load = 0x00 Protocol = LACP

Flags: S - Device is sending Slow LACPDUs F - Device is sending fast LACPDUs.  
A - Device is in active mode. P - Device is in passive mode.

Local information:

Port	Flags	State	LACP port Priority	Admin Key	Oper Key	Port Number	Port State
Fa0/18	SA	bndl	32768	0x2	0x2	0x12	0x3D

Partner's information:

Port	Flags	LACP port Priority	Dev ID	Age	Oper Key	Port Number	Port State
Fa0/18	SA	32768	000b.fd20.ba00	5s	0x17	0x12	0x3D

Age of the port in the current state: 0d:02h:49m:56s

Port-channels in the group:

-----

Port-channel: Po2 (Primary Aggregator)

-----

Age of the Port-channel = 0d:02h:52m:18s  
Logical slot/port = 1/1                    Number of ports = 3  
HotStandBy port = null  
Port state = Port-channel Ag-Inuse  
Protocol = LACP

Ports in the Port-channel:

Index	Load	Port	EC state	No of bits
0	00	Fa0/16	Active	0
0	00	Fa0/17	Active	0
0	00	Fa0/18	Active	0

Time since last port bundled:    0d:02h:49m:57s    Fa0/18

ASW1#

```
ASW1#show spanning-tree inconsistentports
```

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

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

```
ASW1#
```

ASW1#show spanning-tree summary

Switch is in pvst mode

Root bridge for: VLAN0010

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
VLAN0010	0	0	0	1	1
VLAN0200	0	0	0	2	2
2 vlans	0	0	0	3	3

ASW1#



ASW1#show udld

Interface Fa0/1

---

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

Interface Fa0/2

---

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

Interface Fa0/3

---

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

Interface Fa0/4

---

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

Interface Fa0/5

---

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

Interface Fa0/6

---

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

Interface Fa0/7

---

Port enable administrative configuration setting: Disabled  
Port enable operational state: Disabled

Current bidirectional state: Unknown

Interface Fa0/8

---

Port enable administrative configuration setting: Disabled

Port enable operational state: Disabled

Current bidirectional state: Unknown

Interface Fa0/9

---

Port enable administrative configuration setting: Disabled

Port enable operational state: Disabled

Current bidirectional state: Unknown

Interface Fa0/10

---

Port enable administrative configuration setting: Disabled

Port enable operational state: Disabled

Current bidirectional state: Unknown

Interface Fa0/11

---

Port enable administrative configuration setting: Disabled

Port enable operational state: Disabled

Current bidirectional state: Unknown

Interface Fa0/12

---

Port enable administrative configuration setting: Disabled

Port enable operational state: Disabled

Current bidirectional state: Unknown

Interface Fa0/13

---

Port enable administrative configuration setting: Disabled

Port enable operational state: Disabled

Current bidirectional state: Unknown

Interface Fa0/14

---

Port enable administrative configuration setting: Disabled

Port enable operational state: Disabled

Current bidirectional state: Unknown

Interface Fa0/15

---

Port enable administrative configuration setting: Disabled

Port enable operational state: Disabled

Current bidirectional state: Unknown

Interface Fa0/16

---

Port enable administrative configuration setting: Disabled

Port enable operational state: Disabled

Current bidirectional state: Unknown

Interface Fa0/17

---

Port enable administrative configuration setting: Disabled

Port enable operational state: Disabled

Current bidirectional state: Unknown

Interface Fa0/18

---

Port enable administrative configuration setting: Disabled

Port enable operational state: Disabled

Current bidirectional state: Unknown

Interface Fa0/19

---

Port enable administrative configuration setting: Disabled

Port enable operational state: Disabled

Current bidirectional state: Unknown

Interface Fa0/20

---

Port enable administrative configuration setting: Disabled

Port enable operational state: Disabled

Current bidirectional state: Unknown

Interface Fa0/21

---

Port enable administrative configuration setting: Disabled

Port enable operational state: Disabled

Current bidirectional state: Unknown

Interface Fa0/22

---

Port enable administrative configuration setting: Disabled

Port enable operational state: Disabled

Current bidirectional state: Unknown

Interface Fa0/23

---

Port enable administrative configuration setting: Disabled

Port enable operational state: Disabled

Current bidirectional state: Unknown

Interface Fa0/24

---

Port enable administrative configuration setting: Disabled

Port enable operational state: Disabled

Current bidirectional state: Unknown

ASW1#

```
ASW1#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)	LACP	Fa0/19 (Pd)	Fa0/20 (P)	Fa0/21 (P)
2	Po2 (SU)	LACP	Fa0/16 (Pd)	Fa0/17 (P)	Fa0/18 (P)

ASW1#

```
ASW1#show etherchannel protocol
      Channel-group listing:
      -----
```

```
Group: 1
-----
Protocol: LACP
```

```
Group: 2
-----
Protocol: LACP

ASW1#
```

```
ASW1#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 = Passive Gcchange = -  
 Port-channel = Po1 GC = - Pseudo port-channel =  
 Po1  
 Port index = 0 Load = 0x00 Protocol = LACP

Flags: S - Device is sending Slow LACPDUs F - Device is sending fast LACPDUs.  
 A - Device is in active mode. P - Device is in passive mode.

Local information:

Port	Flags	State	LACP port Priority	Admin Key	Oper Key	Port Number	Port
Fa0/19	SP	bndl	32768	0x1	0x1	0x13	0x3C

Partner's information:

Port	Flags	LACP port Priority	Dev ID	Age	Oper Key	Port Number	Port State
Fa0/19	SA	32768	000d.bde3.6e00	15s	0xD	0x10	0x3D

Age of the port in the current state: 0d:02h:51m:29s

Port: Fa0/20

-----

Port state = Up Mstr In-Bndl  
 Channel group = 1 Mode = Passive Gcchange = -  
 Port-channel = Po1 GC = - Pseudo port-channel =  
 Po1  
 Port index = 0 Load = 0x00 Protocol = LACP

Flags: S - Device is sending Slow LACPDUs F - Device is sending fast LACPDUs.  
 A - Device is in active mode. P - Device is in passive mode.

Local information:

Port	Flags	State	LACP port Priority	Admin Key	Oper Key	Port Number	Port
Fa0/20	SP	bndl	32768	0x1	0x1	0x14	0x3C

Partner's information:

LACP port	Oper	Port	Port
-----------	------	------	------

Port	Flags	Priority	Dev ID	Age	Key	Number	State
Fa0/20	SA	32768	000d.bde3.6e00	27s	0xD	0x11	0x3D

Age of the port in the current state: 0d:02h:51m:31s

Port: Fa0/21

-----

Port state = Up Mstr In-Bndl  
Channel group = 1 Mode = Passive Gcchange = -  
Port-channel = Po1 GC = - Pseudo port-channel =  
Po1  
Port index = 0 Load = 0x00 Protocol = LACP

Flags: S - Device is sending Slow LACPDUs F - Device is sending fast LACPDUs.  
A - Device is in active mode. P - Device is in passive mode.

Local information:

Port	Flags	State	LACP port Priority	Admin Key	Oper Key	Port Number	Port
Fa0/21	SP	bndl	32768	0x1	0x1	0x15	0x3C

Partner's information:

Port	Flags	LACP port Priority	Dev ID	Age	Oper Key	Port Number	Port State
Fa0/21	SA	32768	000d.bde3.6e00	5s	0xD	0x12	0x3D

Age of the port in the current state: 0d:02h:51m:32s

Group: 2

-----

Ports in the group:

-----

Port: Fa0/16

-----

Port state = Up Mstr In-Bndl  
Channel group = 2 Mode = Active Gcchange = -  
Port-channel = Po2 GC = - Pseudo port-channel =  
Po2  
Port index = 0 Load = 0x00 Protocol = LACP

Flags: S - Device is sending Slow LACPDUs F - Device is sending fast LACPDUs.  
A - Device is in active mode. P - Device is in passive mode.

Local information:

LACP port	Admin	Oper	Port	Port
-----------	-------	------	------	------



Port State	Flags	State	Priority	Key	Key	Number	
Fa0/16	SA	bndl	32768	0x2	0x2	0x10	0x3D

Partner's information:

Port	Flags	LACP port Priority	Dev ID	Age	Oper Key	Port Number	Port State
Fa0/16	SA	32768	000b.fd20.ba00	25s	0x17	0x10	0x3D

Age of the port in the current state: 0d:02h:50m:44s

Port: Fa0/17

-----

Port state = Up Mstr In-Bndl  
Channel group = 2 Mode = Active Gcchange = -  
Port-channel = Po2 GC = - Pseudo port-channel = Po2  
Port index = 0 Load = 0x00 Protocol = LACP

Flags: S - Device is sending Slow LACPDU's F - Device is sending fast LACPDU's.  
A - Device is in active mode. P - Device is in passive mode.

Local information:

Port State	Flags	State	LACP port Priority	Admin Key	Oper Key	Port Number	Port
Fa0/17	SA	bndl	32768	0x2	0x2	0x11	0x3D

Partner's information:

Port	Flags	LACP port Priority	Dev ID	Age	Oper Key	Port Number	Port State
Fa0/17	SA	32768	000b.fd20.ba00	26s	0x17	0x11	0x3D

Age of the port in the current state: 0d:02h:50m:45s

Port: Fa0/18

-----

Port state = Up Mstr In-Bndl  
Channel group = 2 Mode = Active Gcchange = -  
Port-channel = Po2 GC = - Pseudo port-channel = Po2  
Port index = 0 Load = 0x00 Protocol = LACP

Flags: S - Device is sending Slow LACPDU's F - Device is sending fast LACPDU's.  
A - Device is in active mode. P - Device is in passive mode.

Local information:

Port	Flags	State	LACP port Priority	Admin Key	Oper Key	Port Number	Port
Fa0/18	SA	bndl	32768	0x2	0x2	0x12	0x3D

Partner's information:

Port	Flags	LACP port Priority	Dev ID	Age	Oper Key	Port Number	Port State
Fa0/18	SA	32768	000b.fd20.ba00	27s	0x17	0x12	0x3D

Age of the port in the current state: 0d:02h:50m:46s

ASW1#

```
ASW1#show etherchannel load-balance
Source MAC address
ASW1#
```

```
ASW1#show etherchannel port-channel
Channel-group listing:
-----
```

Group: 1

-----

Port-channels in the group:

-----

Port-channel: Po1 (Primary Aggregator)

-----

Age of the Port-channel = 0d:02h:53m:18s  
Logical slot/port = 1/0 Number of ports = 3  
HotStandBy port = null  
Port state = Port-channel Ag-Inuse  
Protocol = LACP

Ports in the Port-channel:

Index	Load	Port	EC state	No of bits
0	00	Fa0/19	Passive	0
0	00	Fa0/20	Passive	0
0	00	Fa0/21	Passive	0

Time since last port bundled: 0d:02h:51m:47s Fa0/19

Group: 2

-----

Port-channels in the group:

-----

Port-channel: Po2 (Primary Aggregator)

-----

Age of the Port-channel = 0d:02h:53m:19s  
Logical slot/port = 1/1 Number of ports = 3  
HotStandBy port = null  
Port state = Port-channel Ag-Inuse  
Protocol = LACP

Ports in the Port-channel:

Index	Load	Port	EC state	No of bits
0	00	Fa0/16	Active	0
0	00	Fa0/17	Active	0
0	00	Fa0/18	Active	0

Time since last port bundled: 0d:02h:50m:58s Fa0/18

ASW1#

```
ASW1#show pagp neighbor
```

```
ASW1#
```

ASW1#show lacp neighbor

Flags: S - Device is requesting Slow LACPDUs  
F - Device is requesting Fast LACPDUs  
A - Device is in Active mode P - Device is in Passive mode

Channel group 1 neighbors

Partner's information:

Port	Flags	LACP port Priority	Dev ID	Age	Oper Key	Port Number	Port State
Fa0/19	SA	32768	000d.bde3.6e00	16s	0xD	0x10	0x3D
Fa0/20	SA	32768	000d.bde3.6e00	28s	0xD	0x11	0x3D
Fa0/21	SA	32768	000d.bde3.6e00	6s	0xD	0x12	0x3D

Channel group 2 neighbors

Partner's information:

Port	Flags	LACP port Priority	Dev ID	Age	Oper Key	Port Number	Port State
------	-------	-----------------------	--------	-----	-------------	----------------	---------------

```
Fa0/16 SA 32768 000b.fd20.ba00 28s 0x17 0x10 0x3D
Fa0/17 SA 32768 000b.fd20.ba00 23s 0x17 0x11 0x3D
Fa0/18 SA 32768 000b.fd20.ba00 24s 0x17 0x12 0x3D
ASW1#
```

```
ASW1#show port-security
Secure Port MaxSecureAddr CurrentAddr SecurityViolation Security
Action
              (Count)          (Count)          (Count)
-----
```

```
--
```

Fa0/1	1	1	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

ASW1#



```
ASW1#show port-security address
      Secure Mac Address Table
```

```
-----
```

Vlan	Mac Address	Type	Ports	Remaining Age (mins)
-----	-----	-----	-----	-----
10	001c.238e.dbbc	SecureDynamic	Fa0/1	-

```
-----
```

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

```
ASW1#
```

