

Лабораторная работа №3

- Настройка на коммутаторах протокола LACP агрегирования каналов технологии EtherChannel

- L2-SW-1

```
L2-SW-1(config)#int range g0/0-1
L2-SW-1(config-if-range)#shut
L2-SW-1(config-if-range)#channel-group 1 mode active
L2-SW-1(config-if-range)#no shut

L2-SW-1(config)#int range g0/2-3
L2-SW-1(config-if-range)#shut
L2-SW-1(config-if-range)#channel-group 2 mode active
L2-SW-1(config-if-range)#no shut

L2-SW-1(config)#int range g1/0-1
L2-SW-1(config-if-range)#shut
L2-SW-1(config-if-range)#channel-group 3 mode active
L2-SW-1(config-if-range)#no shut

L2-SW-1(config)#int range g1/2-3
L2-SW-1(config-if-range)#shut
L2-SW-1(config-if-range)#channel-group 4 mode active
L2-SW-1(config-if-range)#no shut

L2-SW-1(config)#int g2/0
L2-SW-1(config-if)#shut
L2-SW-1(config-if)#channel-group 4 mode active
L2-SW-1(config-if)#no shut
```

```
L2-SW-1#sh int stats
```

Port-channel1

Switching path	Pkts In	Chars In	Pkts Out	Chars Out
Processor	669	60232	0	0
Route cache	0	0	0	0
Total	669	60232	0	0

Port-channel2

Switching path	Pkts In	Chars In	Pkts Out	Chars Out
Processor	721	63124	0	0
Route cache	0	0	0	0
Total	721	63124	0	0

Port-channel3

Switching path	Pkts In	Chars In	Pkts Out	Chars Out
Processor	666	60264	0	0
Route cache	0	0	0	0
Total	666	60264	0	0

Port-channel4

Switching path	Pkts In	Chars In	Pkts Out	Chars Out
Processor	828	81255	0	0
Route cache	0	0	0	0
Total	828	81255	0	0

```
L2-SW-1#sh sp
```

```
VLAN0001
```

```
Spanning tree enabled protocol ieee
```

```
Root ID      Priority      24577
```

```
Address      0cec.7252.0000
```

```
This bridge is the root
```

```
Hello Time   2 sec  Max Age 20 sec  Forward Delay 15 sec
```

```
Bridge ID  Priority      24577 (priority 24576 sys-id-ext 1)
```

```
Address      0cec.7252.0000
```

```
Hello Time   2 sec  Max Age 20 sec  Forward Delay 15 sec
```

```
Aging Time   300 sec
```

Interface	Role	Sts	Cost	Prio.Nbr	Type
Po4	Desg	FWD	4	128.65	Shr
Po3	Desg	FWD	4	128.66	Shr
Po2	Desg	FWD	3	128.67	Shr
Po1	Desg	FWD	3	128.68	Shr

◦ L2-SW-2

```
L2-SW-2(config)#int range g0/0-2
```

```
L2-SW-2(config-if-range)#shut
```

```
L2-SW-2(config-if-range)#channel-group 4 mode passive
```

```
L2-SW-2(config-if-range)#no shut
```

```
L2-SW-2(config)#int g0/3
```

```
L2-SW-2(config-if)#shut
```

```
L2-SW-2(config-if)#channel-group 5 mode active
```

```
L2-SW-2(config-if)#no shut
```

```
L2-SW-2(config)#int g1/0
```

```
L2-SW-2(config-if)#shut
```

```
L2-SW-2(config-if)#channel-group 5 mode active
```

```
L2-SW-2(config-if)#no shut
```

```
L2-SW-2(config)#int range g1/1-2
```

```
L2-SW-2(config-if-range)#shut
```

```
L2-SW-2(config-if-range)#channel-group 6 mode active
```

```
L2-SW-2(config-if-range)#no shut
```

```
L2-SW-2(config)#int g1/3
```

```
L2-SW-2(config-if)#shut
```

```
L2-SW-2(config-if)#channel-group 7 mode active
```

```
L2-SW-2(config-if)#no shut
```

```
L2-SW-2(config)#int g2/0
```

```
L2-SW-2(config-if)#shut
```

```
L2-SW-2(config-if)#channel-group 7 mode active
```

```
L2-SW-2(config-if)#no shut
```

```
L2-SW-2#sh int stats
```

```
Port-channel7
```

Switching path	Pkts In	Chars In	Pkts Out	Chars Out
Processor	1230	90143	0	0
Route cache	0	0	0	0
Total	1230	90143	0	0

```
Port-channel6
```

Switching path	Pkts In	Chars In	Pkts Out	Chars Out
Processor	1317	94939	0	0
Route cache	0	0	0	0
Total	1317	94939	0	0

```
Port-channel5
```

Switching path	Pkts In	Chars In	Pkts Out	Chars Out
Processor	1267	92102	0	0
Route cache	0	0	0	0
Total	1267	92102	0	0

```
Port-channel4
```

Switching path	Pkts In	Chars In	Pkts Out	Chars Out
Processor	1493	114968	0	0
Route cache	0	0	0	0
Total	1493	114968	0	0

```
L2-SW-2#sh sp
```

```
VLAN0001
```

```
Spanning tree enabled protocol ieee
```

```
Root ID Priority 24577
```

```
Address 0cec.7252.0000
```

```
Cost 4
```

```
Port 65 (Port-channel4)
```

```
Hello Time 2 sec Max Age 20 sec Forward Delay 15 sec
```

```
Bridge ID Priority 28673 (priority 28672 sys-id-ext 1)
```

```
Address 0ca9.270d.0000
```

```
Hello Time 2 sec Max Age 20 sec Forward Delay 15 sec
```

```
Aging Time 300 sec
```

Interface	Role	Sts	Cost	Prio.Nbr	Type
Po4	Root	FWD	4	128.65	Shr
Po5	Altn	BLK	3	128.66	Shr
Po6	Altn	BLK	3	128.67	Shr
Po7	Altn	BLK	3	128.68	Shr

◦ L2-SW-3

```
L2-SW-3(config)#int range g0/0-1
```

```
L2-SW-3(config-if-range)#shut
```

```
L2-SW-3(config-if-range)#channel-group 1 mode passive
```

```
L2-SW-3(config-if-range)#no shut
```

```
L2-SW-3(config)#int range g0/2-3
```

```
L2-SW-3(config-if-range)#shut
```

```
L2-SW-3(config-if-range)#channel-group 7 mode passive
```

```
L2-SW-3(config-if-range)#no shut
```

```
L2-SW-3#sh int stats
```

```
Port-channel1
```

Switching path	Pkts In	Chars In	Pkts Out	Chars Out
Processor	1416	98124	0	0
Route cache	0	0	0	0
Total	1416	98124	0	0

```
Port-channel7
```

Switching path	Pkts In	Chars In	Pkts Out	Chars Out
Processor	921	72604	0	0
Route cache	0	0	0	0
Total	921	72604	0	0

```
L2-SW-3#sh sp
```

```
VLAN0001
```

```
Spanning tree enabled protocol ieee
```

```
Root ID      Priority      24577
    Address    0cec.7252.0000
    Cost       3
    Port       66 (Port-channel1)
    Hello Time  2 sec  Max Age 20 sec  Forward Delay 15 sec
```

```
Bridge ID  Priority      32769 (priority 32768 sys-id-ext 1)
    Address    0cec.7d98.0000
    Hello Time  2 sec  Max Age 20 sec  Forward Delay 15 sec
    Aging Time  300 sec
```

Interface	Role	Sts	Cost	Prio.Nbr	Type
Gi1/0	Desg	FWD	4	128.5	Shr
Gi1/1	Desg	FWD	4	128.6	Shr
Po7	Desg	FWD	3	128.65	Shr
Po1	Root	FWD	3	128.66	Shr

◦ L2-SW-4

```
L2-SW-4(config)#int range g0/0-1
```

```
L2-SW-4(config-if-range)#shut
```

```
L2-SW-4(config-if-range)#channel-group 2 mode passive
```

```
L2-SW-4(config-if-range)#no shut
```

```
L2-SW-4(config)#int range g0/2-3
```

```
L2-SW-4(config-if-range)#shut
```

```
L2-SW-4(config-if-range)#channel-group 6 mode passive
```

```
L2-SW-4(config-if-range)#no shut
```

```
L2-SW-4#sh int stats
```

```
Port-channel2
```

Switching path	Pkts In	Chars In	Pkts Out	Chars Out
Processor	1356	94911	0	0
Route cache	0	0	0	0
Total	1356	94911	0	0

```
Port-channel6
```

Switching path	Pkts In	Chars In	Pkts Out	Chars Out
Processor	839	67612	0	0
Route cache	0	0	0	0
Total	839	67612	0	0

```
L2-SW-4#sh sp
```

```
VLAN0001
```

```
Spanning tree enabled protocol ieee
```

```
Root ID      Priority      24577
    Address    0cec.7252.0000
    Cost       3
    Port       66 (Port-channel2)
    Hello Time  2 sec  Max Age 20 sec  Forward Delay 15 sec
```

```
Bridge ID  Priority      32769 (priority 32768 sys-id-ext 1)
    Address    0c2f.bdc2.0000
    Hello Time  2 sec  Max Age 20 sec  Forward Delay 15 sec
    Aging Time  300 sec
```

Interface	Role	Sts	Cost	Prio.Nbr	Type
Gi1/0	Desg	FWD	4	128.5	Shr
Gi1/1	Desg	FWD	4	128.6	Shr
Po6	Desg	FWD	3	128.65	Shr
Po2	Root	FWD	3	128.66	Shr

◦ L2-SW-5

```

L2-SW-5(config)#int range g0/0-1
L2-SW-5(config-if-range)#shut
L2-SW-5(config-if-range)#channel-group 3 mode passive
L2-SW-5(config-if-range)#no shut

L2-SW-5(config)#int range g0/2-3
L2-SW-5(config-if-range)#shut
L2-SW-5(config-if-range)#channel-group 5 mode passive
L2-SW-5(config-if-range)#no shut

```

```
L2-SW-5#sh int stats
```

Port-channel3

Switching path	Pkts In	Chars In	Pkts Out	Chars Out
Processor	1379	95318	0	0
Route cache	0	0	0	0
Total	1379	95318	0	0

Port-channel5

Switching path	Pkts In	Chars In	Pkts Out	Chars Out
Processor	885	69935	0	0
Route cache	0	0	0	0
Total	885	69935	0	0

```
L2-SW-5#sh sp
```

VLAN0001

```

Spanning tree enabled protocol ieee
Root ID    Priority    24577
  Address   0cec.7252.0000
  Cost      3
  Port      66 (Port-channel3)
  Hello Time 2 sec  Max Age 20 sec  Forward Delay 15 sec

```

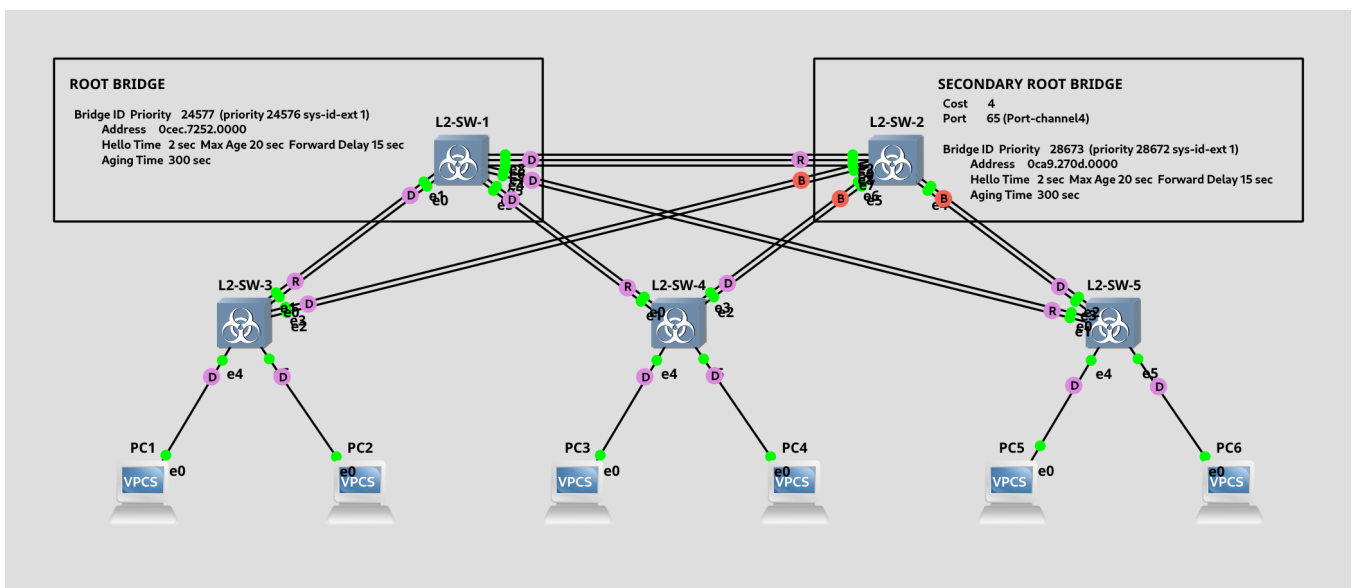
```

Bridge ID  Priority    32769 (priority 32768 sys-id-ext 1)
  Address   0c90.df13.0000
  Hello Time 2 sec  Max Age 20 sec  Forward Delay 15 sec
  Aging Time 300 sec

```

Interface	Role	Sts	Cost	Prio.Nbr	Type
Gi1/0	Desg	FWD	4	128.5	Shr
Gi1/1	Desg	FWD	4	128.6	Shr
Po5	Desg	FWD	3	128.65	Shr
Po3	Root	FWD	3	128.66	Shr

Схема сети



Проверка доступности персональных компьютеров

- PC1

- To PC2

```
PC1> ping 192.168.1.2
```

```
84 bytes from 192.168.1.2 icmp_seq=1 ttl=64 time=1.620 ms
84 bytes from 192.168.1.2 icmp_seq=2 ttl=64 time=10.424 ms
84 bytes from 192.168.1.2 icmp_seq=3 ttl=64 time=2.398 ms
84 bytes from 192.168.1.2 icmp_seq=4 ttl=64 time=6.965 ms
84 bytes from 192.168.1.2 icmp_seq=5 ttl=64 time=2.375 ms
```

- To PC3

```
PC1> ping 192.168.2.1
```

```
84 bytes from 192.168.2.1 icmp_seq=1 ttl=64 time=7.791 ms
84 bytes from 192.168.2.1 icmp_seq=2 ttl=64 time=9.264 ms
84 bytes from 192.168.2.1 icmp_seq=3 ttl=64 time=5.230 ms
84 bytes from 192.168.2.1 icmp_seq=4 ttl=64 time=13.775 ms
84 bytes from 192.168.2.1 icmp_seq=5 ttl=64 time=8.563 ms
```

- To PC4

```
PC1> ping 192.168.2.2
```

```
84 bytes from 192.168.2.2 icmp_seq=1 ttl=64 time=9.666 ms
84 bytes from 192.168.2.2 icmp_seq=2 ttl=64 time=2.110 ms
84 bytes from 192.168.2.2 icmp_seq=3 ttl=64 time=5.384 ms
84 bytes from 192.168.2.2 icmp_seq=4 ttl=64 time=6.931 ms
84 bytes from 192.168.2.2 icmp_seq=5 ttl=64 time=7.417 ms
```

- To PC5

```
PC1> ping 192.168.3.1
```

```
84 bytes from 192.168.3.1 icmp_seq=1 ttl=64 time=5.403 ms
84 bytes from 192.168.3.1 icmp_seq=2 ttl=64 time=9.254 ms
84 bytes from 192.168.3.1 icmp_seq=3 ttl=64 time=5.658 ms
84 bytes from 192.168.3.1 icmp_seq=4 ttl=64 time=8.754 ms
84 bytes from 192.168.3.1 icmp_seq=5 ttl=64 time=7.274 ms
```

- To PC6

```
PC1> ping 192.168.3.2
```

```
84 bytes from 192.168.3.2 icmp_seq=1 ttl=64 time=8.640 ms
84 bytes from 192.168.3.2 icmp_seq=2 ttl=64 time=12.778 ms
84 bytes from 192.168.3.2 icmp_seq=3 ttl=64 time=4.852 ms
84 bytes from 192.168.3.2 icmp_seq=4 ttl=64 time=3.326 ms
84 bytes from 192.168.3.2 icmp_seq=5 ttl=64 time=10.043 ms
```

- PC2

- To PC3

```
PC2> ping 192.168.2.1
```

```
84 bytes from 192.168.2.1 icmp_seq=1 ttl=64 time=8.649 ms
84 bytes from 192.168.2.1 icmp_seq=2 ttl=64 time=4.912 ms
84 bytes from 192.168.2.1 icmp_seq=3 ttl=64 time=9.386 ms
84 bytes from 192.168.2.1 icmp_seq=4 ttl=64 time=7.370 ms
84 bytes from 192.168.2.1 icmp_seq=5 ttl=64 time=6.053 ms
```

- To PC4

```
PC2> ping 192.168.2.2
```

```
84 bytes from 192.168.2.2 icmp_seq=1 ttl=64 time=15.300 ms
84 bytes from 192.168.2.2 icmp_seq=2 ttl=64 time=1.889 ms
84 bytes from 192.168.2.2 icmp_seq=3 ttl=64 time=4.917 ms
84 bytes from 192.168.2.2 icmp_seq=4 ttl=64 time=7.351 ms
84 bytes from 192.168.2.2 icmp_seq=5 ttl=64 time=15.628 ms
```

- To PC5

```
PC2> ping 192.168.3.1
```

```
84 bytes from 192.168.3.1 icmp_seq=1 ttl=64 time=6.011 ms
84 bytes from 192.168.3.1 icmp_seq=2 ttl=64 time=8.439 ms
84 bytes from 192.168.3.1 icmp_seq=3 ttl=64 time=6.778 ms
84 bytes from 192.168.3.1 icmp_seq=4 ttl=64 time=4.606 ms
84 bytes from 192.168.3.1 icmp_seq=5 ttl=64 time=1.966 ms
```

- To PC6

```
PC2> ping 192.168.3.2
```

```
84 bytes from 192.168.3.2 icmp_seq=1 ttl=64 time=10.502 ms
84 bytes from 192.168.3.2 icmp_seq=2 ttl=64 time=14.782 ms
84 bytes from 192.168.3.2 icmp_seq=3 ttl=64 time=8.519 ms
84 bytes from 192.168.3.2 icmp_seq=4 ttl=64 time=6.828 ms
84 bytes from 192.168.3.2 icmp_seq=5 ttl=64 time=7.183 ms
```

- PC3

- To PC4

```
PC3> ping 192.168.2.2
```

```
192.168.2.2 icmp_seq=1 timeout
84 bytes from 192.168.2.2 icmp_seq=2 ttl=64 time=4.866 ms
84 bytes from 192.168.2.2 icmp_seq=3 ttl=64 time=7.331 ms
84 bytes from 192.168.2.2 icmp_seq=4 ttl=64 time=1.012 ms
84 bytes from 192.168.2.2 icmp_seq=5 ttl=64 time=4.372 ms
```

- To PC5

```
PC3> ping 192.168.3.1
```

```
84 bytes from 192.168.3.1 icmp_seq=1 ttl=64 time=12.586 ms
84 bytes from 192.168.3.1 icmp_seq=2 ttl=64 time=2.243 ms
84 bytes from 192.168.3.1 icmp_seq=3 ttl=64 time=7.451 ms
84 bytes from 192.168.3.1 icmp_seq=4 ttl=64 time=3.524 ms
84 bytes from 192.168.3.1 icmp_seq=5 ttl=64 time=13.593 ms
```

- To PC6

```
PC3> ping 192.168.3.2
```

```
84 bytes from 192.168.3.2 icmp_seq=1 ttl=64 time=3.276 ms
84 bytes from 192.168.3.2 icmp_seq=2 ttl=64 time=10.136 ms
84 bytes from 192.168.3.2 icmp_seq=3 ttl=64 time=7.496 ms
84 bytes from 192.168.3.2 icmp_seq=4 ttl=64 time=6.775 ms
84 bytes from 192.168.3.2 icmp_seq=5 ttl=64 time=9.741 ms
```

- PC4

- To PC5

```
PC4> ping 192.168.3.1
```

```
84 bytes from 192.168.3.1 icmp_seq=1 ttl=64 time=47.457 ms
84 bytes from 192.168.3.1 icmp_seq=2 ttl=64 time=7.816 ms
84 bytes from 192.168.3.1 icmp_seq=3 ttl=64 time=6.483 ms
84 bytes from 192.168.3.1 icmp_seq=4 ttl=64 time=1.836 ms
84 bytes from 192.168.3.1 icmp_seq=5 ttl=64 time=8.011 ms
```

- To PC6

```
PC4> ping 192.168.3.2
```

```
84 bytes from 192.168.3.2 icmp_seq=1 ttl=64 time=9.896 ms
84 bytes from 192.168.3.2 icmp_seq=2 ttl=64 time=1.635 ms
84 bytes from 192.168.3.2 icmp_seq=3 ttl=64 time=4.730 ms
84 bytes from 192.168.3.2 icmp_seq=4 ttl=64 time=14.912 ms
84 bytes from 192.168.3.2 icmp_seq=5 ttl=64 time=6.652 ms
```

- PC5

- To PC6

```
PC5> ping 192.168.3.2
```

```
84 bytes from 192.168.3.2 icmp_seq=1 ttl=64 time=2.154 ms
84 bytes from 192.168.3.2 icmp_seq=2 ttl=64 time=1.757 ms
84 bytes from 192.168.3.2 icmp_seq=3 ttl=64 time=0.757 ms
84 bytes from 192.168.3.2 icmp_seq=4 ttl=64 time=2.026 ms
84 bytes from 192.168.3.2 icmp_seq=5 ttl=64 time=3.767 ms
```

- Show Running Command Outputs

- L2-SW-1

```
Current configuration : 5688 bytes
!
! Last configuration change at 14:53:15 UTC Sat Aug 17 2024
!
version 15.0
service timestamps debug datetime msec
service timestamps log datetime msec
no service password-encryption
service compress-config
!
hostname L2-SW-1
!
boot-start-marker
boot-end-marker
!
!
!
no aaa new-model
!
!
!
vtp domain CISCO-VIOS
vtp mode transparent
!
!
!
ip cef
no ipv6 cef
!
!
!
spanning-tree mode pvst
spanning-tree extend system-id
spanning-tree vlan 1 priority 24576
!
vlan internal allocation policy ascending
!
vlan 100
    name VLAN100
!
vlan 200,300
!
!
!
interface Port-channel4
    switchport
!
interface Port-channel3
    switchport
!
interface Port-channel2
    switchport
!
interface Port-channel1
    switchport
!
interface GigabitEthernet0/0
    media-type rj45
    negotiation auto
```



```

    channel-group 1 mode active
!
interface GigabitEthernet0/1
    media-type rj45
    negotiation auto
    channel-group 1 mode active
!
interface GigabitEthernet0/2
    media-type rj45
    negotiation auto
    channel-group 2 mode active
!
interface GigabitEthernet0/3
    media-type rj45
    negotiation auto
    channel-group 2 mode active
!
interface GigabitEthernet1/0
    media-type rj45
    negotiation auto
    channel-group 3 mode active
!
interface GigabitEthernet1/1
    media-type rj45
    negotiation auto
    channel-group 3 mode active
!
interface GigabitEthernet1/2
    media-type rj45
    negotiation auto
    channel-group 4 mode active
!
interface GigabitEthernet1/3
    media-type rj45
    negotiation auto
    channel-group 4 mode active
!
interface GigabitEthernet2/0
    media-type rj45
    negotiation auto
    channel-group 4 mode active
!
ip forward-protocol nd
!
no ip http server
no ip http secure-server
!
!
!
line con 0
line aux 0
line vty 0 4
line vty 5 15
!
!
end

```

◦ L2-SW-2

```

Current configuration : 5691 bytes
!
! Last configuration change at 14:53:15 UTC Sat Aug 17 2024
!
version 15.0
service timestamps debug datetime msec
service timestamps log datetime msec
no service password-encryption
service compress-config
!
hostname L2-SW-2
!
boot-start-marker
boot-end-marker
!
!

```

```
!  
no aaa new-model  
!  
!  
!  
vtp domain CISCO-vIOS  
vtp mode transparent  
!  
!  
!  
ip cef  
no ipv6 cef  
!  
!  
!  
spanning-tree mode pvst  
spanning-tree extend system-id  
spanning-tree vlan 1 priority 28672  
!  
vlan internal allocation policy ascending  
!  
vlan 100  
    name VLAN100  
!  
vlan 200,300  
!  
!  
!  
interface Port-channel4  
    switchport  
!  
interface Port-channel5  
    switchport  
!  
interface Port-channel6  
    switchport  
!  
interface Port-channel7  
    switchport  
!  
interface GigabitEthernet0/0  
    media-type rj45  
    negotiation auto  
    channel-group 4 mode passive  
!  
interface GigabitEthernet0/1  
    media-type rj45  
    negotiation auto  
    channel-group 4 mode passive  
!  
interface GigabitEthernet0/2  
    media-type rj45  
    negotiation auto  
    channel-group 4 mode passive  
!  
interface GigabitEthernet0/3  
    media-type rj45  
    negotiation auto  
    channel-group 5 mode active  
!  
interface GigabitEthernet1/0  
    media-type rj45  
    negotiation auto  
    channel-group 5 mode active  
!  
interface GigabitEthernet1/1  
    media-type rj45  
    negotiation auto  
    channel-group 6 mode active  
!  
interface GigabitEthernet1/2  
    media-type rj45  
negotiation auto  
    channel-group 6 mode active  
!  
interface GigabitEthernet1/3  
    media-type rj45
```

```

    negotiation auto
    channel-group 7 mode active
!
interface GigabitEthernet2/0
    media-type rj45
    negotiation auto
    channel-group 7 mode active
!
ip forward-protocol nd
!
no ip http server
no ip http secure-server
!
!
!
line con 0
line aux 0
line vty 0 4
line vty 5 15
!
!
end

```

◦ L2-SW-3

```

Current configuration : 5235 bytes
!
! Last configuration change at 14:53:14 UTC Sat Aug 17 2024
!
version 15.0
service timestamps debug datetime msec
service timestamps log datetime msec
no service password-encryption
service compress-config
!
hostname L2-SW-3
!
boot-start-marker
boot-end-marker
!
!
!
no aaa new-model
!
!
!
vtp domain CISCO-VIOS
vtp mode transparent
!
!
!
ip cef
no ipv6 cef
!
!
!
spanning-tree mode pvst
spanning-tree extend system-id
!
vlan internal allocation policy ascending
!
vlan 100
    name VLAN100
!
vlan 200,300
!
!
!
interface Port-channel1
    switchport
!
interface Port-channel7
    switchport
!
interface GigabitEthernet0/0
    media-type rj45

```

```

media-type rj45
negotiation auto
channel-group 1 mode passive
!
interface GigabitEthernet0/1
media-type rj45
negotiation auto
channel-group 1 mode passive
!
interface GigabitEthernet0/2
media-type rj45
negotiation auto
channel-group 7 mode passive
!
interface GigabitEthernet0/3
media-type rj45
negotiation auto
channel-group 7 mode passive
!
interface GigabitEthernet1/0
media-type rj45
negotiation auto
!
interface GigabitEthernet1/1
media-type rj45
negotiation auto
!
ip forward-protocol nd
!
no ip http server
no ip http secure-server
!
!
!
line con 0
line aux 0
line vty 0 4
line vty 5 15
!
!
end

```

◦ L2-SW-4

```

Current configuration : 5235 bytes
!
! Last configuration change at 14:53:15 UTC Sat Aug 17 2024
!
version 15.0
service timestamps debug datetime msec
service timestamps log datetime msec
no service password-encryption
service compress-config
!
hostname L2-SW-4
!
boot-start-marker
boot-end-marker
!
!
!
no aaa new-model
!
!
!
vtp domain CISCO-vIOS
vtp mode transparent
!
!
!
ip cef
no ipv6 cef
!
!
!
spanning-tree mode pvst

```

```

spanning-tree extend system-id
!
vlan internal allocation policy ascending
!
vlan 100
    name VLAN100
!
vlan 200,300
!
!
!
interface Port-channel2
    switchport
!
interface Port-channel6
    switchport
!
interface GigabitEthernet0/0
    media-type rj45
    negotiation auto
    channel-group 2 mode passive
!
interface GigabitEthernet0/1
    media-type rj45
    negotiation auto
    channel-group 2 mode passive
!
interface GigabitEthernet0/2
    media-type rj45
    negotiation auto
    channel-group 6 mode passive
!
interface GigabitEthernet0/3
    media-type rj45
    negotiation auto
    channel-group 6 mode passive
!
interface GigabitEthernet1/0
    media-type rj45
    negotiation auto
!
interface GigabitEthernet1/1
    media-type rj45
    negotiation auto
!
ip forward-protocol nd
!
no ip http server
no ip http secure-server
!
!
!
line con 0
line aux 0
line vty 0 4
line vty 5 15
!
!
end

```

◦ L2-SW-5

```

Current configuration : 5235 bytes
!
! Last configuration change at 14:53:14 UTC Sat Aug 17 2024
!
version 15.0
service timestamps debug datetime msec
service timestamps log datetime msec
no service password-encryption
service compress-config
!
hostname L2-SW-5
!
boot-start-marker
boot-end-marker

```

```

!
!
!
no aaa new-model
!
!
!
vtp domain CISCO-vIOS
vtp mode transparent
!
!
!
ip cef
no ipv6 cef
!
!
!
spanning-tree mode pvst
spanning-tree extend system-id
!
vlan internal allocation policy ascending
!
vlan 100
    name VLAN100
!
vlan 200,300
!
!
!
interface Port-channel3
    switchport
!
interface Port-channel5
    switchport
!
interface GigabitEthernet0/0
    media-type rj45
    negotiation auto
    channel-group 3 mode passive
!
interface GigabitEthernet0/1
    media-type rj45
    negotiation auto
    channel-group 3 mode passive
!
interface GigabitEthernet0/2
    media-type rj45
    negotiation auto
    channel-group 5 mode passive
!
interface GigabitEthernet0/3
    media-type rj45
    negotiation auto
    channel-group 5 mode passive
!
interface GigabitEthernet1/0
    media-type rj45
    negotiation auto
!
interface GigabitEthernet1/1
    media-type rj45
    negotiation auto
!
ip forward-protocol nd
!
no ip http server
no ip http secure-server
!
!
!
line con 0
line aux 0
line vty 0 4
line vty 5 15
!
!
end

```

