Лаб 3 Настройка интерфейсов типа Ethernet
Топология
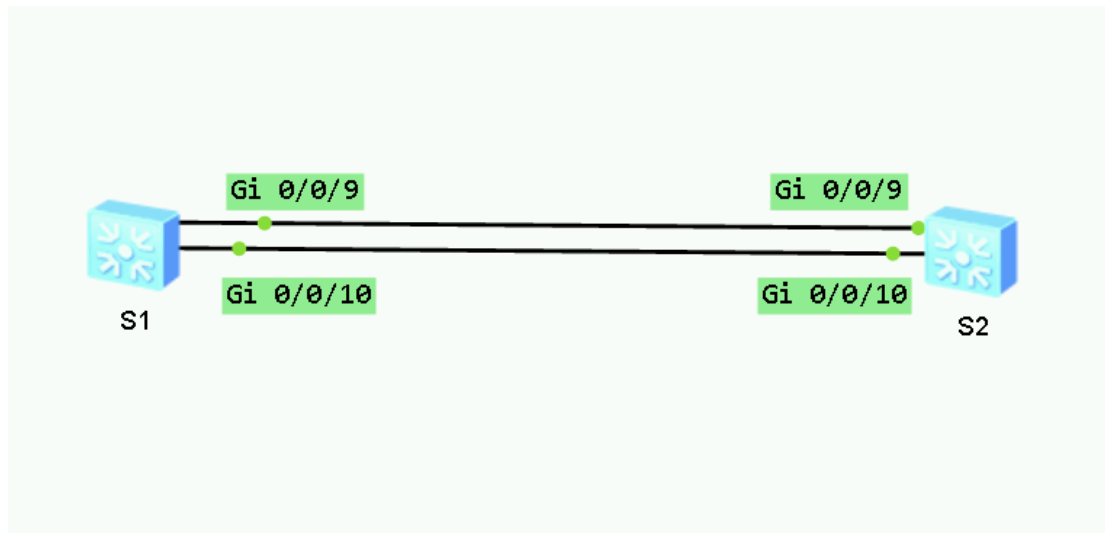
Рис 1.1

Задание
Базовая настройка Ethernet-коммутатора

Режим auto-negotiation включен на интерфейсах коммутаторов Huawei по умолчанию. Интерфейсы с G0/0/9 до G0/0/10 на коммутаторах S1 и S2 должны быть настроены вручную.

Измените имя устройства и выведите информацию о настройках интерфейсов G0/0/9 и G0/0/10 на устройстве S1.

```
<Huawei>system-view
[Huawei]sysname S1
[S1]display interface GigabitEthernet 0/0/9
GigabitEthernet0/0/9 current state : UP
Line protocol current state : UP
Description:
Switch Port, Link-type : trunk(negotiated),
PVID :   1, TPID : 8100(Hex), The Maximum Frame Length is 9216
IP Sending Frames' Format is PKTFMT_ETHNT_2, Hardware address is d0d0-4ba6-aab0
Current system time: 2016-11-23 14:18:37
Port Mode: COMMON COPPER
Speed : 1000,   Loopback: NONE
Duplex: FULL,   Negotiation: ENABLE
Mdi   : AUTO,   Flow-control: DISABLE
Last 300 seconds input rate 256 bits/sec, 0 packets/sec
Last 300 seconds output rate 912 bits/sec, 0 packets/sec
Input peak rate 13976 bits/sec, Record time: 2016-11-22 14:59:12
Output peak rate 13976 bits/sec, Record time: 2016-11-22 14:59:12

Input:  8802 packets, 1242101 bytes
 Unicast:                854,  Multicast:               7017
 Broadcast:              931,  Jumbo:                   0
 Discard:                  0,  Pause:                 0
 Frames:                   0
```

```
   Total Error:             0
   CRC:                0,  Giants:           0
   Jabbers:            0,  Fragments:           0
   Runts:              0,  DropEvents:          0
   Alignments:           0,  Symbols:             0
   Ignoreds:             0

Output:  53495 packets, 7626413 bytes
   Unicast:            231,  Multicast:        49564
   Broadcast:          3700,  Jumbo:            0
   Discard:            0,  Pause:            0

   Total Error:           0
   Collisions:           0,  ExcessiveCollisions:      0
   Late Collisions:         0,  Deferreds:          0
   Buffers Purged:         0

     Input bandwidth utilization threshold : 80.00%
     Output bandwidth utilization threshold: 80.00%
     Input bandwidth utilization  :   0%
     Output bandwidth utilization :   0%

[S1]display interface GigabitEthernet 0/0/10
GigabitEthernet0/0/10 current state : UP
Line protocol current state : UP
Description:
Switch Port, Link-type : trunk(negotiated),
PVID :    1, TPID : 8100(Hex), The Maximum Frame Length is 9216
IP Sending Frames' Format is PKTFMT_ETHNT_2, Hardware address is d0d0-4ba6-aab0
Current system time: 2016-11-23 14:22:22
Port Mode: COMMON COPPER
Speed : 1000,   Loopback: NONE
Duplex: FULL,   Negotiation: ENABLE
Mdi   : AUTO,   Flow-control: DISABLE
Last 300 seconds input rate 72 bits/sec, 0 packets/sec
Last 300 seconds output rate 1024 bits/sec, 0 packets/sec
Input peak rate 14032 bits/sec, Record time: 2016-11-22 14:59:12
Output peak rate 14032 bits/sec, Record time: 2016-11-22 14:59:12

Input:  7025 packets, 786010 bytes
   Unicast:            0,  Multicast:        7025
   Broadcast:          0,  Jumbo:            0
   Discard:            0,  Pause:            0
   Frames:             0

   Total Error:           0
   CRC:                0,  Giants:           0
   Jabbers:            0,  Fragments:           0
   Runts:              0,  DropEvents:          0
   Alignments:           0,  Symbols:             0
   Ignoreds:             0
```

Output: 54507 packets, 7979793 bytes
 Unicast: 150, Multicast: 49709
 Broadcast: 4648, Jumbo: 0
 Discard: 0, Pause: 0

 Total Error: 0
 Collisions: 0, ExcessiveCollisions: 0
 Late Collisions: 0, Deferreds: 0
 Buffers Purged: 0

   Input bandwidth utilization threshold : 80.00%
   Output bandwidth utilization threshold: 80.00%
   Input bandwidth utilization :   0%
   Output bandwidth utilization :   0%

Установите скорость 100 Mbit/s для интерфейсов G0/0/9 и G0/0/10 на коммутаторе S1. Перед изменением скорости интерфейса, отключите режим auto-negotiation.

[S1]interface GigabitEthernet 0/0/9
[S1-GigabitEthernet0/0/9]undo negotiation auto
[S1-GigabitEthernet0/0/9]speed 100
[S1-GigabitEthernet0/0/9]quit
[S1]interface GigabitEthernet 0/0/10
[S1-GigabitEthernet0/0/10]undo negotiation auto
[S1-GigabitEthernet0/0/10]speed 100

Установите скорость 100 Mbit/s для интерфейсов G0/0/9 и G0/0/10 на коммутаторе S2 .

<Quidway>system-view
[Quidway]sysname S2
[S2]interface GigabitEthernet 0/0/9
[S2-GigabitEthernet0/0/9]undo negotiation auto
[S2-GigabitEthernet0/0/9]speed 100
[S2-GigabitEthernet0/0/9]quit
[S2]interface GigabitEthernet 0/0/10
[S2-GigabitEthernet0/0/10]undo negotiation auto
[S2-GigabitEthernet0/0/10]speed 100

Проверьте была ли изменена скорость на интерфейсах G0/0/9 и G0/0/10 на устройстве S1.

[S1]display interface GigabitEthernet 0/0/9
GigabitEthernet0/0/9 current state : UP
Line protocol current state : UP
Description:
Switch Port, Link-type : trunk(negotiated),
PVID :   1, TPID : 8100(Hex), The Maximum Frame Length is 9216
IP Sending Frames' Format is PKTFMT_ETHNT_2, Hardware address is d0d0-4ba6-aab0
Current system time: 2016-11-23 14:29:45
Port Mode: COMMON COPPER
Speed : 100,   Loopback: NONE
Duplex: FULL,   Negotiation: DISABLE
Mdi   : AUTO,   Flow-control: DISABLE
……часть вывода пропущена……

[S1]display interface GigabitEthernet 0/0/10
GigabitEthernet0/0/10 current state : UP
Line protocol current state : UP
Description:
Switch Port, Link-type : trunk(negotiated),
PVID :   1, TPID : 8100(Hex), The Maximum Frame Length is 9216
IP Sending Frames' Format is PKTFMT_ETHNT_2, Hardware address is d0d0-4ba6-aab0
Current system time: 2016-11-23 14:32:53
Port Mode: COMMON COPPER
Speed : 100,   Loopback: NONE
Duplex: FULL,   Negotiation: DISABLE
Mdi   : AUTO,   Flow-control: DISABLE
……часть вывода пропущена……