

1) Первоначальная настройка маршрутизаторов:

а) Настройка R1:

```
<R1>system-view
[R1]int gi 0/0/0
[R1-GigabitEthernet0/0/0]ip address 10.1.1.1 30
[R1-GigabitEthernet0/0/0]quit
[R1]int LoopBack 1
[R1-LoopBack1]ip address 1.1.1.9 32
```

б) Настройка R2:

```
<R2>sys
[R2]int GigabitEthernet 0/0/0
[R2-GigabitEthernet0/0/0]ip address 10.1.1.2 30
[R2-GigabitEthernet0/0/0]quit
[R2]int loopback 1
[R2-LoopBack1]ip add 2.2.2.9 32
[R2-LoopBack1]quit
```

2) Настройка динамической маршрутизации:

а) Настройка R1:

```
[R1]ospf 1
[R1-ospf-1]area 0
[R1-ospf-1-area-0.0.0.0]network 1.1.1.9 0.0.0.0
[R1-ospf-1-area-0.0.0.0]network 10.1.1.0 0.0.0.3
```

б) Настройка R2:

```
[R2]ospf 1
[R2-ospf-1]area 0
[R2-ospf-1-area-0.0.0.0]network 2.2.2.9 0.0.0.0
[R2-ospf-1-area-0.0.0.0]network 10.1.1.0 0.0.0.3
```

3) Настройка MPLS:

а) Настройка R1:

```
[R1]mpls lsr-id 1.1.1.9
[R1]mpls
```

```
Info: Mpls starting, please wait... OK!
```

```
[R1-mpls]quit  
[R1]int gi 0/0/0  
[R1-GigabitEthernet0/0/0]mpls  
[R1-GigabitEthernet0/0/0]quit
```

б) Настройка R2:

```
[R2]mpls lsr-id 2.2.2.9  
[R2]mpls  
Info: Mpls starting, please wait... OK!  
[R2-mpls]quit  
[R2]int GigabitEthernet 0/0/0  
[R2-GigabitEthernet0/0/0]mpls  
[R2-GigabitEthernet0/0/0]quit
```

4) Статическая маршрутизация по меткам:

а) Настройка R1:

```
[R1]static-lsp ingress R1toR2 destination 2.2.2.9 32 nexthop 10.1.1.2 out-label 20  
[R1]static-lsp egress R2toR1 incoming-interface GigabitEthernet 0/0/0 in-label 60
```

б) Настройка R2:

```
[R2]static-lsp egress R1toR2 incoming-interface GigabitEthernet 0/0/0 in-label 20  
[R2]static-lsp ingress R2toR1 destination 1.1.1.9 32 nexthop 10.1.1.1 out-label 60
```

5) Проверка связности сети

```
<R2>ping lsp ip 1.1.1.9 32  
LSP PING FEC: IPV4 PREFIX 1.1.1.9/32/ : 100 data bytes, press CTRL_C to  
break  
Reply from 1.1.1.9: bytes=100 Sequence=1 time=3 ms  
Reply from 1.1.1.9: bytes=100 Sequence=2 time=10 ms  
Reply from 1.1.1.9: bytes=100 Sequence=3 time=5 ms  
Reply from 1.1.1.9: bytes=100 Sequence=4 time=3 ms  
Reply from 1.1.1.9: bytes=100 Sequence=5 time=10 ms  
--- FEC: IPV4 PREFIX 1.1.1.9/32 ping statistics ---
```

5 packet(s) transmitted

5 packet(s) received

0.00% packet loss

round-trip min/avg/max = 3/6/10 ms