

5. Запускаем длинный ping (R1: ping -c 1000 1.0.0.2) и разрываем линк R2-Sw – теряется в районе 15-20 пакетов.

Это связано с тем, что hold-timer в OSPF на broadcast средах равен 40 сек.

Если ping посылается каждые 2 сек, то максимум потеряется 20 пакетов. Конечно, в реальных условиях это неприемлемо:

```
<R1>ping -c 1000 1.0.0.2
PING 1.0.0.2: 56 data bytes, press CTRL_C to break
Reply from 1.0.0.2: bytes=56 Sequence=1 ttl=254 time=2 ms
Reply from 1.0.0.2: bytes=56 Sequence=2 ttl=254 time=10 ms
Reply from 1.0.0.2: bytes=56 Sequence=3 ttl=254 time=1 ms
Reply from 1.0.0.2: bytes=56 Sequence=4 ttl=254 time=1 ms
Reply from 1.0.0.2: bytes=56 Sequence=5 ttl=254 time=10 ms
Reply from 1.0.0.2: bytes=56 Sequence=6 ttl=254 time=1 ms
Reply from 1.0.0.2: bytes=56 Sequence=7 ttl=254 time=1 ms
Jan  3 2001 00:42:59+04:00 R1  %%01IFPDT/4/IF_STATE(1)[12]:Interface
GigabitEthernet0/0/1 has turned into DOWN state.
<R1>
Jan  3 2001 00:42:59+04:00 R1  %%01IFNET/4/LINK_STATE(1)[13]:The line
protocol IP on the interface GigabitEthernet0/0/1 has entered the DOWN state.
<R1>
Jan          3          2001          00:42:59+04:00          R1
%%01OSPF/3/NBR_CHG_DOWN(1)[14]:Neighbor event:neighbor state changed
to Down. (ProcessId=1, NeighborAddress=10.1.1.2, NeighborEvent=KillNbr,
NeighborPreviousState=Full, NeighborCurrentState=Down)
<R1>
Jan          3          2001          00:42:59+04:00          R1
%%01OSPF/3/NBR_DOWN_REASON(1)[15]:Neighbor state leaves full or
changed to Down. (ProcessId=1, NeighborRouterId=10.1.1.2, NeighborAreaId=0,
NeighborInterface=GigabitEthernet0/0/1,NeighborDownImmediate
reason=Neighbor      Down      Due      to      Kill      Neighbor,
NeighborDownPrimeReason=Physical      Interface      State      Change,
NeighborChangeTime=2001-01-03 00:42:59+04:00)
Request time out
<R1>
Reply from 1.0.0.2: bytes=56 Sequence=9 ttl=255 time=10 ms
```

```
Reply from 1.0.0.2: bytes=56 Sequence=10 ttl=255 time=1 ms
Reply from 1.0.0.2: bytes=56 Sequence=11 ttl=255 time=1 ms
Reply from 1.0.0.2: bytes=56 Sequence=12 ttl=255 time=10 ms
Reply from 1.0.0.2: bytes=56 Sequence=13 ttl=255 time=1 ms
Reply from 1.0.0.2: bytes=56 Sequence=14 ttl=255 time=1 ms
Reply from 1.0.0.2: bytes=56 Sequence=15 ttl=255 time=10 ms
Reply from 1.0.0.2: bytes=56 Sequence=16 ttl=255 time=1 ms
Reply from 1.0.0.2: bytes=56 Sequence=17 ttl=255 time=1 ms
Reply from 1.0.0.2: bytes=56 Sequence=18 ttl=255 time=10 ms
Reply from 1.0.0.2: bytes=56 Sequence=19 ttl=255 time=1 ms
Reply from 1.0.0.2: bytes=56 Sequence=20 ttl=255 time=1 ms
```

```
Jan  3 2001 00:43:05+04:00 R1  %%01IFPDT/4/IF_STATE(1)[16]:Interface
GigabitEthernet0/0/1 has turned into UP state.
```

```
<R1>
```

```
Jan  3 2001 00:43:05+04:00 R1  %%01IFNET/4/LINK_STATE(1)[17]:The line
protocol IP on the interface GigabitEthernet0/0/1 has entered the UP state.
```

```
<R1>
```

```
Reply from 1.0.0.2: bytes=56 Sequence=21 ttl=255 time=1 ms
```

```
--- 1.0.0.2 ping statistics ---
```

```
21 packet(s) transmitted
```

```
20 packet(s) received
```

```
4.76% packet loss
```

```
round-trip min/avg/max = 1/3/10 ms
```