TSN2201
Computer Networks

Lab Test Report

Tutorial Section : TT9L

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Content

1 Connectivity Checks

1.1 Static + Default Routing

1.1.1 PC to PC

1.1.1.1 PC1

- PC1 to PC2

```
C:\>ping 211.10.2.100

Pinging 211.10.2.100 with 32 bytes of data:

Reply from 211.10.2.100: bytes=32 time=12ms TTL=126
Reply from 211.10.2.100: bytes=32 time=9ms TTL=126
Reply from 211.10.2.100: bytes=32 time<1ms TTL=126
Reply from 211.10.2.100: bytes=32 time<1ms TTL=126

Ping statistics for 211.10.2.100:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 12ms, Average = 5ms
```

- PC1 to PC3

```
C:\>ping 211.10.3.100

Pinging 211.10.3.100 with 32 bytes of data:

Reply from 211.10.3.100: bytes=32 time=18ms TTL=125
Reply from 211.10.3.100: bytes=32 time<1ms TTL=125
Reply from 211.10.3.100: bytes=32 time=18ms TTL=125
Reply from 211.10.3.100: bytes=32 time=1ms TTL=125

Ping statistics for 211.10.3.100:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 18ms, Average = 9ms
```

- PC1 to PC4

```
C:\>ping 211.10.4.100

Pinging 211.10.4.100 with 32 bytes of data:

Reply from 211.10.4.100: bytes=32 time=1ms TTL=124
Reply from 211.10.4.100: bytes=32 time<1ms TTL=124
Reply from 211.10.4.100: bytes=32 time=13ms TTL=124
Reply from 211.10.4.100: bytes=32 time<1ms TTL=124

Ping statistics for 211.10.4.100:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 13ms, Average = 3ms
```

- PC1 to PC5

```
C:\>ping 211.10.5.100

Pinging 211.10.5.100 with 32 bytes of data:

Reply from 211.10.5.100: bytes=32 time<1ms TTL=123
Reply from 211.10.5.100: bytes=32 time<1ms TTL=123
Reply from 211.10.5.100: bytes=32 time<1ms TTL=123
Reply from 211.10.5.100: bytes=32 time<1ms TTL=123

Ping statistics for 211.10.5.100:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms
```

1.1.1.2 PC2

- PC2 to PC1

```
Cisco Packet Tracer PC Command Line 1.0
C:\>ping 211.10.1.100

Pinging 211.10.1.100 with 32 bytes of data:

Reply from 211.10.1.100: bytes=32 time<1ms TTL=124
Reply from 211.10.1.100: bytes=32 time=1ms TTL=124
Reply from 211.10.1.100: bytes=32 time<1ms TTL=124
Reply from 211.10.1.100: bytes=32 time=10ms TTL=124

Ping statistics for 211.10.1.100:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 10ms, Average = 2ms
```

- PC2 to PC3

```
C:\>ping 211.10.3.100

Pinging 211.10.3.100 with 32 bytes of data:

Reply from 211.10.3.100: bytes=32 time=1ms TTL=126
Reply from 211.10.3.100: bytes=32 time=1ms TTL=126
Reply from 211.10.3.100: bytes=32 time<1ms TTL=126
Reply from 211.10.3.100: bytes=32 time<1ms TTL=126

Ping statistics for 211.10.3.100:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 1ms, Average = 0ms
```

- PC2 to PC4

```
C:\>ping 211.10.4.100

Pinging 211.10.4.100 with 32 bytes of data:

Reply from 211.10.4.100: bytes=32 time<1ms TTL=125
Reply from 211.10.4.100: bytes=32 time<1ms TTL=125
Reply from 211.10.4.100: bytes=32 time<1ms TTL=125
Reply from 211.10.4.100: bytes=32 time=1ms TTL=125

Ping statistics for 211.10.4.100:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 1ms, Average = 0ms
```

- PC2 to PC5

```
C:\>ping 211.10.5.100

Pinging 211.10.5.100 with 32 bytes of data:

Reply from 211.10.5.100: bytes=32 time=1ms TTL=124
Reply from 211.10.5.100: bytes=32 time<1ms TTL=124
Reply from 211.10.5.100: bytes=32 time=1ms TTL=124
Reply from 211.10.5.100: bytes=32 time<1ms TTL=124

Ping statistics for 211.10.5.100:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 1ms, Average = 0ms
```

1.1.1.3 PC3

- PC3 to PC1

```
C:\>ping 211.10.1.100

Pinging 211.10.1.100 with 32 bytes of data:

Reply from 211.10.1.100: bytes=32 time=3ms TTL=125
Reply from 211.10.1.100: bytes=32 time<1ms TTL=125
Reply from 211.10.1.100: bytes=32 time=1ms TTL=125
Reply from 211.10.1.100: bytes=32 time=1ms TTL=125

Ping statistics for 211.10.1.100:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 3ms, Average = 1ms
```

- PC3 to PC2

```
Cisco Packet Tracer PC Command Line 1.0
C:\>ping 211.10.2.100

Pinging 211.10.2.100 with 32 bytes of data:

Reply from 211.10.2.100: bytes=32 time<1ms TTL=124
Reply from 211.10.2.100: bytes=32 time=1ms TTL=124
Reply from 211.10.2.100: bytes=32 time<1ms TTL=124
Reply from 211.10.2.100: bytes=32 time=1ms TTL=124

Ping statistics for 211.10.2.100:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 1ms, Average = 0ms
```

- PC3 to PC4

```
Pinging 211.10.4.100 with 32 bytes of data:

Reply from 211.10.4.100: bytes=32 time=10ms TTL=126
Reply from 211.10.4.100: bytes=32 time=7ms TTL=126
Reply from 211.10.4.100: bytes=32 time<1ms TTL=126
Reply from 211.10.4.100: bytes=32 time=1ms TTL=126

Ping statistics for 211.10.4.100:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 10ms, Average = 4ms
```

- PC3 to PC5

```
C:\>ping 211.10.5.100

Pinging 211.10.5.100 with 32 bytes of data:

Reply from 211.10.5.100: bytes=32 time=17ms TTL=125
Reply from 211.10.5.100: bytes=32 time<1ms TTL=125
Reply from 211.10.5.100: bytes=32 time<1ms TTL=125
Reply from 211.10.5.100: bytes=32 time<1ms TTL=125

Ping statistics for 211.10.5.100:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 17ms, Average = 4ms
```

1.1.1.4 PC4

- PC4 to PC1

```
Cisco Packet Tracer PC Command Line 1.0
C:\>ping 211.10.1.100

Pinging 211.10.1.100 with 32 bytes of data:

Reply from 211.10.1.100: bytes=32 time<1ms TTL=126
Reply from 211.10.1.100: bytes=32 time<1ms TTL=126
Reply from 211.10.1.100: bytes=32 time<1ms TTL=126
Reply from 211.10.1.100: bytes=32 time=11ms TTL=126

Ping statistics for 211.10.1.100:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 11ms, Average = 2ms
```

- PC4 to PC2

```
C:\>ping 211.10.2.100

Pinging 211.10.2.100 with 32 bytes of data:

Reply from 211.10.2.100: bytes=32 time<1ms TTL=125
Reply from 211.10.2.100: bytes=32 time<1ms TTL=125
Reply from 211.10.2.100: bytes=32 time<1ms TTL=125
Reply from 211.10.2.100: bytes=32 time=1ms TTL=125

Ping statistics for 211.10.2.100:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 1ms, Average = 0ms
```

- PC4 to PC3

```
Pinging 211.10.3.100 with 32 bytes of data:

Reply from 211.10.3.100: bytes=32 time=1ms TTL=124
Reply from 211.10.3.100: bytes=32 time<1ms TTL=124
Reply from 211.10.3.100: bytes=32 time<1ms TTL=124
Reply from 211.10.3.100: bytes=32 time<1ms TTL=124

Ping statistics for 211.10.3.100:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 1ms, Average = 0ms
```

- PC4 to PC5

```
C:\>ping 211.10.5.100

Pinging 211.10.5.100 with 32 bytes of data:

Reply from 211.10.5.100: bytes=32 time=16ms TTL=126
Reply from 211.10.5.100: bytes=32 time<1ms TTL=126
Reply from 211.10.5.100: bytes=32 time<1ms TTL=126
Reply from 211.10.5.100: bytes=32 time=9ms TTL=126

Ping statistics for 211.10.5.100:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 16ms, Average = 6ms
```

1.1.1.5 PC5

- PC5 to PC1

```
Cisco Packet Tracer PC Command Line 1.0
C:\>ping 211.10.1.100

Pinging 211.10.1.100 with 32 bytes of data:

Reply from 211.10.1.100: bytes=32 time=2ms TTL=123
Reply from 211.10.1.100: bytes=32 time=9ms TTL=123
Reply from 211.10.1.100: bytes=32 time=1ms TTL=123
Reply from 211.10.1.100: bytes=32 time=15ms TTL=123

Ping statistics for 211.10.1.100:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 1ms, Maximum = 15ms, Average = 6ms
```

- PC5 to PC2

```
C:\>ping 211.10.2.100

Pinging 211.10.2.100 with 32 bytes of data:

Reply from 211.10.2.100: bytes=32 time<1ms TTL=126
Reply from 211.10.2.100: bytes=32 time<1ms TTL=126
Reply from 211.10.2.100: bytes=32 time=9ms TTL=126
Reply from 211.10.2.100: bytes=32 time<1ms TTL=126

Ping statistics for 211.10.2.100:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 9ms, Average = 2ms

C:\>
```

- PC5 to PC3

```
C:\>ping 211.10.3.100

Pinging 211.10.3.100 with 32 bytes of data:

Reply from 211.10.3.100: bytes=32 time=1ms TTL=125
Reply from 211.10.3.100: bytes=32 time<1ms TTL=125
Reply from 211.10.3.100: bytes=32 time<1ms TTL=125
Reply from 211.10.3.100: bytes=32 time<1ms TTL=125

Ping statistics for 211.10.3.100:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 1ms, Average = 0ms
```

- PC5 to PC4

```
C:\>ping 211.10.4.100

Pinging 211.10.4.100 with 32 bytes of data:

Reply from 211.10.4.100: bytes=32 time=1ms TTL=124
Reply from 211.10.4.100: bytes=32 time=1ms TTL=124
Reply from 211.10.4.100: bytes=32 time=1ms TTL=124
Reply from 211.10.4.100: bytes=32 time=2ms TTL=124

Ping statistics for 211.10.4.100:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 1ms, Maximum = 2ms, Average = 1ms
```

1.1.2 Router to Router

1.1.2.1 Router1

- Router1 to Router 2

```
Router>ping 211.10.2.2

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 211.10.2.2, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 0/5/17 ms

Router>
```

- Router1 to Router 3

```
Router>ping 211.10.3.3

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 211.10.3.3, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 0/2/12 ms

Router>
```

- Router1 to Router 4

```
Router>ping 211.10.4.4

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 211.10.4.4, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 0/5/13 ms

Router>
```

- Router1 to Router 5

```
Router>ping 211.10.5.5

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 211.10.5.5, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 0/5/12 ms

Router>
```

1.1.2.2 Router2

- Router2 to Router 1

```
Router>ping 211.10.1.1

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 211.10.1.1, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 0/0/0 ms

Router>
```

- Router2 to Router 3

```
Router>ping 211.10.3.3

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 211.10.3.3, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 0/3/19 ms

Router>
```

- Router2 to Router 4

```
Router>ping 211.10.4.4

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 211.10.4.4, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 0/7/16 ms

Router>
```

- Router2 to Router 5

```
Router>ping 211.10.5.5

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 211.10.5.5, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 0/3/8 ms

Router>
```

1.1.2.3 Router3

- Router3 to Router 1

```
Router>ping 211.10.1.1

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 211.10.1.1, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 0/5/12 ms

Router>
```

- Router3 to Router 2

```
Router>ping 211.10.2.2

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 211.10.2.2, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 0/2/8 ms

Router>
```

- Router3 to Router 4

```
Router>ping 211.10.4.4

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 211.10.4.4, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 0/8/17 ms

Router>
```

- Router3 to Router 5

```
Router>ping 211.10.5.5

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 211.10.5.5, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 0/1/8 ms

Router>
```

1.1.2.4 Router4

- Router4 to Router1

```
Router>ping 211.10.1.1

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 211.10.1.1, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 0/4/13 ms

Router>
```

- Router4 to Router2

```
Router>ping 211.10.2.2

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 211.10.2.2, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 0/6/13 ms

Router>
```

- Router4 to Router3

```
Router>ping 211.10.3.3

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 211.10.3.3, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 0/4/13 ms

Router>
```

- Router4 to Router5

```
Router>ping 211.10.5.5

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 211.10.5.5, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 1/7/13 ms

Router>
```

1.1.2.4 Router5

- Router5 to Router1

```
Router>ping 211.10.1.1

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 211.10.1.1, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 0/1/8 ms

Router>
```

- Router5 to Router2

```
Router>ping 211.10.2.2

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 211.10.2.2, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 0/2/8 ms

Router>
```

- Router5 to Router3

```
Router>ping 211.10.2.2

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 211.10.2.2, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 0/2/8 ms

Router>
```

- Router5 to Router4

```
Router>ping 211.10.4.4

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 211.10.4.4, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 0/0/1 ms

Router>
```

1.1.3 Router to PC

1.1.3.1 Router1

- Router1 to PC1

```
Router>ping 211.10.1.100

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 211.10.1.100, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 0/1/8 ms

Router>
```

- Router1 to PC2

```
Router>ping 211.10.2.100

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 211.10.2.100, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 0/6/12 ms

Router>
```

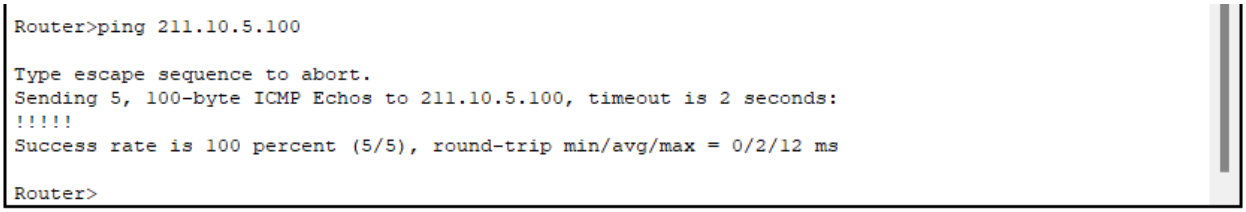
- Router1 to PC3

```
Router>ping 211.10.3.100

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 211.10.3.100, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 0/4/13 ms

Router>
```

- Router1 to PC4

```
Router>ping 211.10.4.100

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 211.10.4.100, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 0/2/10 ms

Router>
```

- Router1 to PC5



1.1.3.2 Router2

- Router2 to PC1

```
Router>ping 211.10.1.1

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 211.10.1.1, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 0/1/8 ms

Router>
```

- Router2 to PC2

```
Router>ping 211.10.2.2

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 211.10.2.2, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 4/5/7 ms

Router>
```

- Router2 to PC3

```
Router>ping 211.10.3.3

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 211.10.3.3, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 0/4/21 ms

Router>
```

- Router2 to PC4

```
Router>ping 211.10.4.4

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 211.10.4.4, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 0/6/12 ms

Router>
```

- Router2 to PC5

```
Router>ping 211.10.5.5

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 211.10.5.5, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 0/1/9 ms

Router>
```

1.1.3.3 Router3

- Router3 to PC1

```
Router>ping 211.10.1.1

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 211.10.1.1, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 0/2/7 ms

Router>
```

- Router3 to PC2

```
Router>ping 211.10.2.2

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 211.10.2.2, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 0/1/7 ms

Router>
```

- Router3 to PC3

```
Router>ping 211.10.3.3

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 211.10.3.3, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 4/5/6 ms

Router>
```

- Router3 to PC4

```
Router>ping 211.10.4.4

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 211.10.4.4, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 0/9/17 ms

Router>
```

- Router3 to PC5

```
Router>ping 211.10.5.5

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 211.10.5.5, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 0/3/8 ms

Router>
```

1.1.3.4 Router4

- Router4 to PC1

```
Router>ping 211.10.1.1

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 211.10.1.1, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 0/4/11 ms

Router>
```

- Router4 to PC2

```
Router>ping 211.10.2.2

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 211.10.2.2, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 0/5/9 ms

Router>
```

- Router4 to PC3

```
Router>ping 211.10.3.3

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 211.10.3.3, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 0/1/8 ms

Router>
```

- Router4 to PC4

```
Router>ping 211.10.4.4

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 211.10.4.4, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 0/2/5 ms

Router>
```

- Router4 to PC5

```
Router>ping 211.10.5.5

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 211.10.5.5, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 0/7/11 ms

Router>
```

1.1.3.5 Router5

- Router5 to PC1

```
Router>ping 211.10.1.1

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 211.10.1.1, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 0/0/1 ms

Router>
```

- Router5 to PC2

```
Router>
Router>ping 211.10.2.2

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 211.10.2.2, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 0/2/12 ms

Router>
```

- Router5 to PC3

```
Router>
Router>ping 211.10.2.2

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 211.10.2.2, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 0/2/12 ms

Router>
```

- Router5 to PC4

```
Router>ping 211.10.4.4

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 211.10.4.4, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 0/0/0 ms

Router>
```

- Router5 to PC5

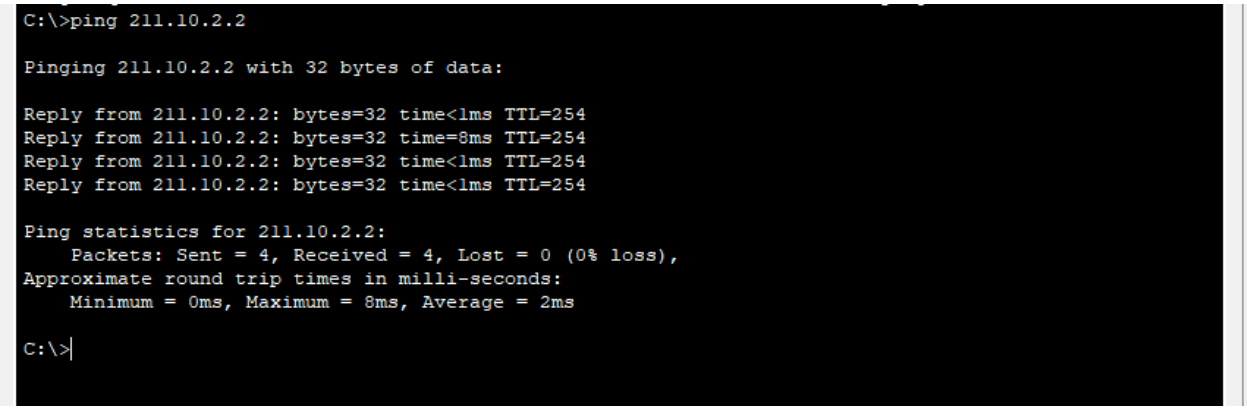
```
Router>ping 211.10.5.5

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 211.10.5.5, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 0/1/5 ms

Router>
```

1.2 OSPF Routing

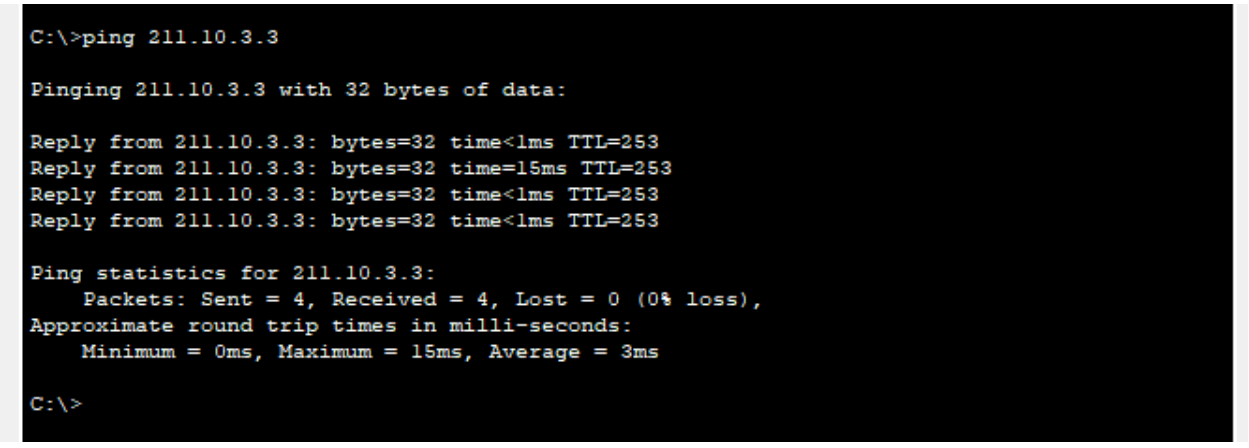
1.2.1 PC to PC

1.2.1.1 PC1

- PC1 to PC2



- PC1 to PC3



- PC1 to PC4

```
C:\>ping 211.10.4.4

Pinging 211.10.4.4 with 32 bytes of data:

Reply from 211.10.4.4: bytes=32 time<1ms TTL=254
Reply from 211.10.4.4: bytes=32 time=1ms TTL=254
Reply from 211.10.4.4: bytes=32 time<1ms TTL=254
Reply from 211.10.4.4: bytes=32 time<1ms TTL=254

Ping statistics for 211.10.4.4:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 1ms, Average = 0ms

C:\>
```

- PC1 to PC5

```
C:\>ping 211.10.5.5

Pinging 211.10.5.5 with 32 bytes of data:

Reply from 211.10.5.5: bytes=32 time=12ms TTL=253
Reply from 211.10.5.5: bytes=32 time=9ms TTL=253
Reply from 211.10.5.5: bytes=32 time<1ms TTL=253
Reply from 211.10.5.5: bytes=32 time<1ms TTL=253

Ping statistics for 211.10.5.5:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 12ms, Average = 5ms

C:\>
```

1.2.1.2 PC2

- PC2 to PC1

```
Pinging 211.10.1.1 with 32 bytes of data:

Reply from 211.10.1.1: bytes=32 time=10ms TTL=254
Reply from 211.10.1.1: bytes=32 time<1ms TTL=254
Reply from 211.10.1.1: bytes=32 time=1ms TTL=254
Reply from 211.10.1.1: bytes=32 time<1ms TTL=254

Ping statistics for 211.10.1.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 10ms, Average = 2ms

C:\>
```

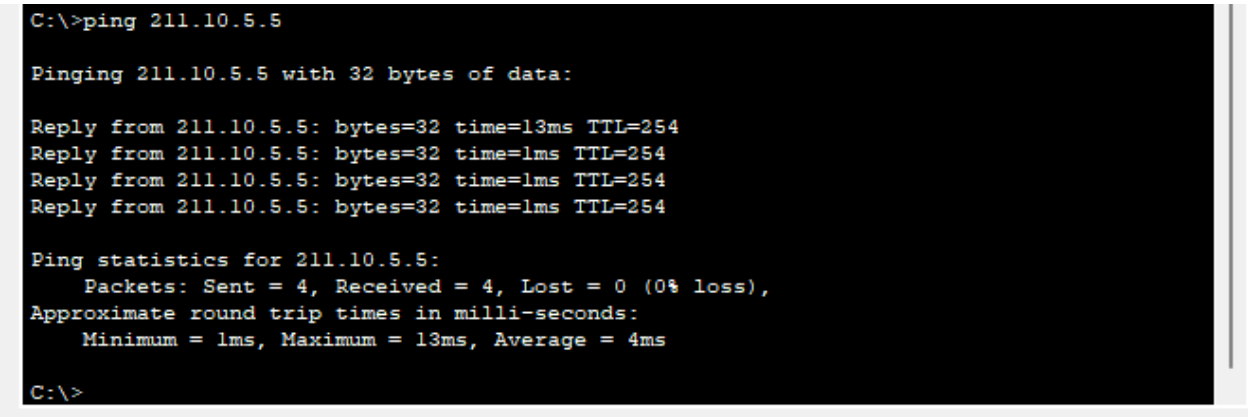
- PC2 to PC3

```
C:\>ping 211.10.3.3

Pinging 211.10.3.3 with 32 bytes of data:

Reply from 211.10.3.3: bytes=32 time<1ms TTL=254
Reply from 211.10.3.3: bytes=32 time<1ms TTL=254
Reply from 211.10.3.3: bytes=32 time=13ms TTL=254
Reply from 211.10.3.3: bytes=32 time<1ms TTL=254

Ping statistics for 211.10.3.3:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 13ms, Average = 3ms

C:\>
```

- PC2 to PC4

```
C:\>ping 211.10.4.4

Pinging 211.10.4.4 with 32 bytes of data:

Reply from 211.10.4.4: bytes=32 time<1ms TTL=253
Reply from 211.10.4.4: bytes=32 time<1ms TTL=253
Reply from 211.10.4.4: bytes=32 time<1ms TTL=253
Reply from 211.10.4.4: bytes=32 time=1ms TTL=253

Ping statistics for 211.10.4.4:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 1ms, Average = 0ms

C:\>
```

- PC2 to PC5


C:\>ping 211.10.5.5
Pinging 211.10.5.5 with 32 bytes of data:
Reply from 211.10.5.5: bytes=32 time=13ms TTL=254
Reply from 211.10.5.5: bytes=32 time=1ms TTL=254
Reply from 211.10.5.5: bytes=32 time=1ms TTL=254
Reply from 211.10.5.5: bytes=32 time=1ms TTL=254
Ping statistics for 211.10.5.5:
Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
Minimum = 1ms, Maximum = 13ms, Average = 4ms
C:\>

1.2.1.3 PC3

- PC3 to PC1

```
Cisco Packet Tracer PC Command Line 1.0
C:\>ping 211.10.1.1

Pinging 211.10.1.1 with 32 bytes of data:

Reply from 211.10.1.1: bytes=32 time=9ms TTL=253
Reply from 211.10.1.1: bytes=32 time=1ms TTL=253
Reply from 211.10.1.1: bytes=32 time<1ms TTL=253
Reply from 211.10.1.1: bytes=32 time=7ms TTL=253

Ping statistics for 211.10.1.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 9ms, Average = 4ms

C:\>
```

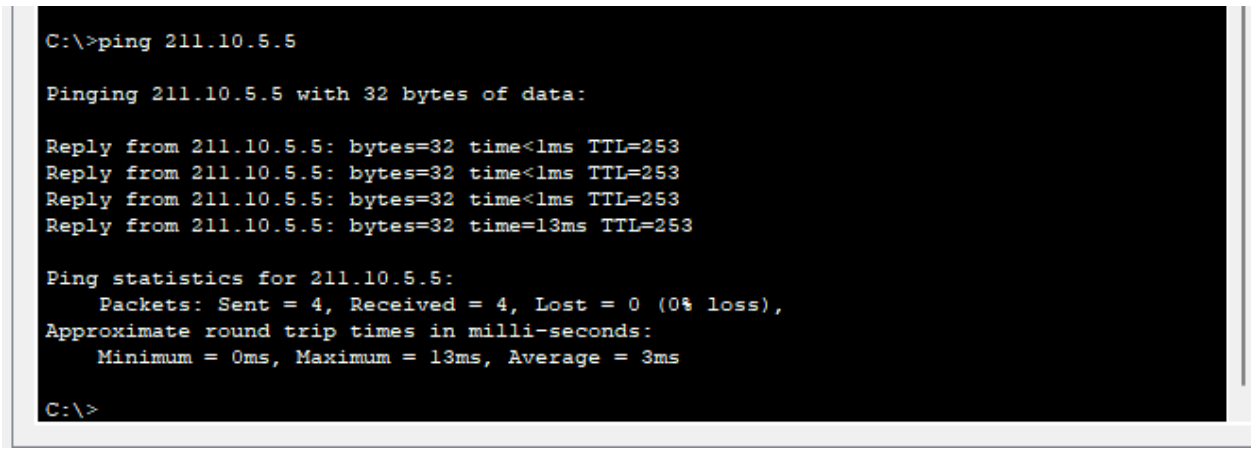
- PC3 to PC2

```
C:\>ping 211.10.2.2

Pinging 211.10.2.2 with 32 bytes of data:

Reply from 211.10.2.2: bytes=32 time<1ms TTL=254
Reply from 211.10.2.2: bytes=32 time<1ms TTL=254
Reply from 211.10.2.2: bytes=32 time=1ms TTL=254
Reply from 211.10.2.2: bytes=32 time<1ms TTL=254

Ping statistics for 211.10.2.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 1ms, Average = 0ms

C:\>
```

- PC3 to PC4

```
C:\>ping 211.10.4.4

Pinging 211.10.4.4 with 32 bytes of data:

Reply from 211.10.4.4: bytes=32 time<1ms TTL=254
Reply from 211.10.4.4: bytes=32 time<1ms TTL=254
Reply from 211.10.4.4: bytes=32 time=10ms TTL=254
Reply from 211.10.4.4: bytes=32 time<1ms TTL=254

Ping statistics for 211.10.4.4:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 10ms, Average = 2ms

C:\>
```

- PC3 to PC5


C:\>ping 211.10.5.5
Pinging 211.10.5.5 with 32 bytes of data:
Reply from 211.10.5.5: bytes=32 time<1ms TTL=253
Reply from 211.10.5.5: bytes=32 time<1ms TTL=253
Reply from 211.10.5.5: bytes=32 time<1ms TTL=253
Reply from 211.10.5.5: bytes=32 time=13ms TTL=253
Ping statistics for 211.10.5.5:
Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
Minimum = 0ms, Maximum = 13ms, Average = 3ms
C:\>

1.2.1.4 PC4

- PC4 to PC1

```
Cisco Packet Tracer PC Command Line 1.0
C:\>ping 211.10.1.1

Pinging 211.10.1.1 with 32 bytes of data:

Reply from 211.10.1.1: bytes=32 time=10ms TTL=254
Reply from 211.10.1.1: bytes=32 time=10ms TTL=254
Reply from 211.10.1.1: bytes=32 time<1ms TTL=254
Reply from 211.10.1.1: bytes=32 time=7ms TTL=254

Ping statistics for 211.10.1.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 10ms, Average = 6ms

C:\>
```

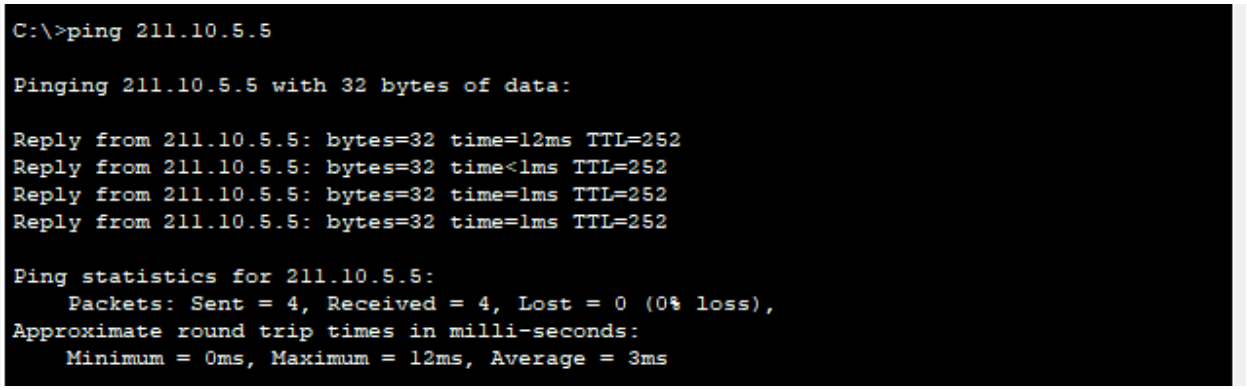
- PC4 to PC2

```
C:\>ping 211.10.2.2

Pinging 211.10.2.2 with 32 bytes of data:

Reply from 211.10.2.2: bytes=32 time<1ms TTL=253
Reply from 211.10.2.2: bytes=32 time<1ms TTL=253
Reply from 211.10.2.2: bytes=32 time<1ms TTL=253
Reply from 211.10.2.2: bytes=32 time<1ms TTL=253

Ping statistics for 211.10.2.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\>
```

- PC4 to PC3

```
C:\>ping 211.10.3.3

Pinging 211.10.3.3 with 32 bytes of data:

Reply from 211.10.3.3: bytes=32 time<1ms TTL=254
Reply from 211.10.3.3: bytes=32 time=9ms TTL=254
Reply from 211.10.3.3: bytes=32 time=9ms TTL=254
Reply from 211.10.3.3: bytes=32 time<1ms TTL=254

Ping statistics for 211.10.3.3:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 9ms, Average = 4ms

C:\>
```

- PC4 to PC5


C:\>ping 211.10.5.5
Pinging 211.10.5.5 with 32 bytes of data:
Reply from 211.10.5.5: bytes=32 time=12ms TTL=252
Reply from 211.10.5.5: bytes=32 time<1ms TTL=252
Reply from 211.10.5.5: bytes=32 time=1ms TTL=252
Reply from 211.10.5.5: bytes=32 time=1ms TTL=252
Ping statistics for 211.10.5.5:
Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
Minimum = 0ms, Maximum = 12ms, Average = 3ms

1.2.1.5 PC5

- PC5 to PC1

```
Cisco Packet Tracer PC Command Line 1.0
C:\>ping 211.10.1.1

Pinging 211.10.1.1 with 32 bytes of data:

Reply from 211.10.1.1: bytes=32 time<1ms TTL=253
Reply from 211.10.1.1: bytes=32 time=1ms TTL=253
Reply from 211.10.1.1: bytes=32 time=1ms TTL=253
Reply from 211.10.1.1: bytes=32 time=11ms TTL=253

Ping statistics for 211.10.1.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 11ms, Average = 3ms
```

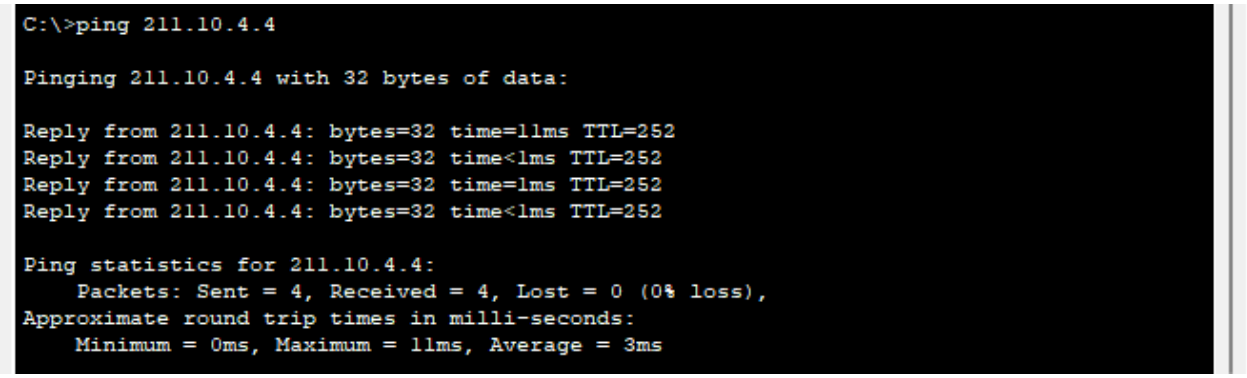
- PC5 to PC2

```
Pinging 211.10.2.2 with 32 bytes of data:

Reply from 211.10.2.2: bytes=32 time<1ms TTL=254
Reply from 211.10.2.2: bytes=32 time<1ms TTL=254
Reply from 211.10.2.2: bytes=32 time=8ms TTL=254
Reply from 211.10.2.2: bytes=32 time=10ms TTL=254

Ping statistics for 211.10.2.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 10ms, Average = 4ms
```

- PC5 to PC3

```
C:\>ping 211.10.3.3

Pinging 211.10.3.3 with 32 bytes of data:

Reply from 211.10.3.3: bytes=32 time<1ms TTL=253
Reply from 211.10.3.3: bytes=32 time=1ms TTL=253
Reply from 211.10.3.3: bytes=32 time=9ms TTL=253
Reply from 211.10.3.3: bytes=32 time<1ms TTL=253

Ping statistics for 211.10.3.3:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 9ms, Average = 2ms
```

- PC5 to PC4


C:\>ping 211.10.4.4
Pinging 211.10.4.4 with 32 bytes of data:
Reply from 211.10.4.4: bytes=32 time=11ms TTL=252
Reply from 211.10.4.4: bytes=32 time<1ms TTL=252
Reply from 211.10.4.4: bytes=32 time=1ms TTL=252
Reply from 211.10.4.4: bytes=32 time<1ms TTL=252
Ping statistics for 211.10.4.4:
Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
Minimum = 0ms, Maximum = 11ms, Average = 3ms

1.2.2 Router to Router

1.2.2.1 Router 1

- Router1 to Router2

```
Router>ping 211.10.2.2

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 211.10.2.2, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 0/0/0 ms

Router>
```

- Router1 to Router3

```
Router>ping 211.10.3.3

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 211.10.3.3, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 0/6/15 ms

Router>
```

- Router1 to Router4

```
Router>ping 211.10.3.3

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 211.10.3.3, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 0/6/15 ms

Router>
```

- Router1 to Router5

```
Router>ping 211.10.5.5

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 211.10.5.5, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 0/0/1 ms

Router>
```

1.2.2.2 Router 2

- Router2 to Router1

```
Router>ping 211.10.1.1

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 211.10.1.1, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 0/0/0 ms

Router>
```

- Router2 to Router3

```
Router>ping 211.10.3.3

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 211.10.3.3, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 0/1/5 ms

Router>
```

- Router2 to Router4

```
Router>ping 211.10.3.3

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 211.10.3.3, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 0/1/5 ms

Router>
```

- Router2 to Router5

```
Router>ping 211.10.5.5

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 211.10.5.5, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 0/3/9 ms

Router>
```

1.2.2.3 Router 3

- Router3 to Router1

```
Router>ping 211.10.1.1

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 211.10.1.1, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 0/4/9 ms

Router>
```

- Router3 to Router2

```
Router>
Router>ping 211.10.2.2

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 211.10.2.2, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 0/6/12 ms

Router>
```

- Router3 to Router4

```
Router>ping 211.10.4.4

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 211.10.4.4, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 0/2/8 ms
```

- Router3 to Router5

```
Router>ping 211.10.5.5

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 211.10.5.5, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 0/2/12 ms

Router>
```

1.2.2.4 Router 4

- Router4 to Router1

```
Router>ping 211.10.1.1

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 211.10.1.1, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 0/0/3 ms

Router>
```

- Router4 to Router2

```
Router>ping 211.10.2.2

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 211.10.2.2, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 0/0/0 ms

Router>
```

- Router4 to Router3

```
Router>ping 211.10.3.3

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 211.10.3.3, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 0/1/8 ms

Router>
```

- Router4 to Router5

```
Router>ping 211.10.5.5

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 211.10.5.5, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 0/3/8 ms

Router>
```

1.2.2.5 Router 5

- Router5 to Router1

```
Router>ping 211.10.1.1

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 211.10.1.1, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 0/0/1 ms

Router>
```

- Router5 to Router2

```
Router>ping 211.10.2.2

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 211.10.2.2, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 0/1/9 ms

Router>
```

- Router5 to Router3

```
Router>ping 211.10.3.3

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 211.10.3.3, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 0/3/9 ms

Router>
```

- Router5 to Router4

```
Router>ping 211.10.4.4

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 211.10.4.4, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 0/1/8 ms

Router>
```

1.2.3 Router to PC

1.2.3.1 Router 1

- Router1 to PC1

```
Router>ping 211.10.1.100

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 211.10.1.100, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 0/0/0 ms

Router>
```

- Router1 to PC2

```
Router>ping 211.10.2.100

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 211.10.2.100, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 0/0/0 ms

Router>
```

- Router1 to PC3

```
Router>ping 211.10.3.100

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 211.10.3.100, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 0/2/12 ms

Router>
```

- Router1 to PC4

```
Router>ping 211.10.4.100

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 211.10.4.100, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 0/4/8 ms

Router>
```

- Router1 to PC5

```
Router>ping 211.10.5.100

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 211.10.5.100, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 0/4/13 ms

Router>
```

1.2.3.2 Router 2

- Router2 to PC1

```
Router>ping 211.10.1.100

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 211.10.1.100, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 0/0/0 ms

Router>
```

- Router2 to PC2

```
Router>ping 211.10.2.100

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 211.10.2.100, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 0/0/0 ms

Router>
```

- Router2 to PC3

```
Router>ping 211.10.3.100

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 211.10.3.100, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 0/3/9 ms

Router>
```

- Router2 to PC4

```
Router>ping 211.10.4.100

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 211.10.4.100, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 0/4/12 ms

Router>
```

- Router2 to PC5

```
Router>ping 211.10.5.100

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 211.10.5.100, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 0/3/8 ms

Router>
```

1.2.3.3 Router 3

- Router3 to PC1

```
Router>ping 211.10.1.100

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 211.10.1.100, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 0/1/8 ms

Router>
```

- Router3 to PC2

```
Router>ping 211.10.2.100

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 211.10.2.100, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 0/1/8 ms

Router>
```

- Router3 to PC3

```
Router>ping 211.10.3.100

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 211.10.3.100, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 0/0/0 ms

Router>
```

- Router3 to PC4

```
Router>ping 211.10.4.100

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 211.10.4.100, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 0/3/11 ms

Router>
```

- Router3 to PC5

```
Router>ping 211.10.5.100

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 211.10.5.100, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 0/7/13 ms

Router>
```

1.2.3.4 Router 4

- Router4 to PC1

```
Router>ping 211.10.1.100

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 211.10.1.100, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 0/1/8 ms

Router>
```

- Router4 to PC2

```
Router>ping 211.10.2.100

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 211.10.2.100, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 0/1/8 ms

Router>
```

- Router4 to PC3

```
Router>ping 211.10.3.100

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 211.10.3.100, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 0/1/9 ms

Router>
```

- Router4 to PC4

```
Router>ping 211.10.4.100

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 211.10.4.100, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 0/0/0 ms

Router>
```

- Router4 to PC5

```
Router>ping 211.10.5.100

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 211.10.5.100, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 0/1/9 ms

Router>
```

1.2.3.5 Router 5

- Router5 to PC1

```
Router>ping 211.10.1.100

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 211.10.1.100, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 0/2/7 ms

Router>
```

- Router5 to PC2

```
Router>ping 211.10.2.100

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 211.10.2.100, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 0/5/10 ms

Router>
```

- Router5 to PC3

```
Router>ping 211.10.3.100

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 211.10.3.100, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 0/7/19 ms

Router>
```

- Router5 to PC4

```
Router>ping 211.10.4.100

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 211.10.4.100, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 0/2/13 ms

Router>
```

- Router5 to PC5

```
Router>ping 211.10.5.100

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 211.10.5.100, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 0/0/0 ms

Router>
```

2 Routing Table Entries

2.1 Router1

No	Network Address	Network Mask	Interface
1	211.10.1.0	255.255.255.0	FastEthernet0/0
2	211.10.12.0	255.255.255.0	FastEthernet0/1
3	211.10.14.0	255.255.255.0	Ethernet1/1

2.2 Router2

No	Network Address	Network Mask	Interface
1	211.10.2.0	255.255.255.0	FastEthernet0/0
2	211.10.12.0	255.255.255.0	FastEthernet0/1
3	211.10.23.0	255.255.255.0	Ethernet1/1
4	211.10.25.0	255.255.255.0	Ethernet1/0

2.3 Router3

No	Network Address	Network Mask	Interface
1	211.10.3.0	255.255.255.0	FastEthernet0/0
2	211.10.23.0	255.255.255.0	Ethernet1/1
3	211.10.34.0	255.255.255.0	Ethernet1/0

2.4 Router4

No	Network Address	Network Mask	Interface
1	211.10.4.0	255.255.255.0	FastEthernet0/0
2	211.10.14.0	255.255.255.0	Ethernet1/1
3	211.10.34.0	255.255.255.0	Ethernet1/0
4	211.10.45.0	255.255.255.0	FastEthernet0/1

2.5 Router5

No	Network Address	Network Mask	Interface
1	211.10.5.0	255.255.255.0	FastEthernet0/0
2	211.10.45.0	255.255.255.0	FastEthernet0/1
3	211.10.25.0	255.255.255.0	Ethernet1/0