

CCNA LAB 4-3: IP Routing – OSPF

[ตั้งค่าที่ Ranet HQ (คลิกที่เครื่อง console)] :

(ไปยังแท็บ Desktop > คลิก Terminal > กด OK)

```
Ranet-HQ>en
Ranet-HQ#conf t
Enter configuration commands, one per line. End with CNTL/Z.
Ranet-HQ(config)#int fa0/0
Ranet-HQ(config-if)#no sh

%LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to up
Ranet-HQ(config-if)#ip add 128.0.6.142 255.255.255.240
Ranet-HQ(config-if)#int s0/0/0
Ranet-HQ(config-if)#no sh

%LINK-5-CHANGED: Interface Serial0/0/0, changed state to down
Ranet-HQ(config-if)#ip add 128.0.6.157 255.255.255.252
Ranet-HQ(config-if)#int s0/1/0
Ranet-HQ(config-if)#no sh

Ranet-HQ(config-if)#
%LINK-5-CHANGED: Interface Serial0/1/0, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial0/1/0, changed state to up
Ranet-HQ(config-if)#ip add 128.0.6.94 255.255.255.252
Ranet-HQ(config-if)#exit
Ranet-HQ(config)#int loopback 0

%LINK-5-CHANGED: Interface Loopback0, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface Loopback0, changed state to up
Ranet-HQ(config-if)#ip add 1.1.0.1 255.255.255.0
Ranet-HQ(config-if)#exit
```

```
Ranet-HQ(config)#router ospf 1
Ranet-HQ(config-router)#network 128.0.6.128 0.0.0.15 area 0
Ranet-HQ(config-router)#network 128.0.6.156 0.0.0.3 area 0
Ranet-HQ(config-router)#exit
Ranet-HQ(config)#ip route 0.0.0.0 0.0.0.0 se0/1/0
Ranet-HQ(config)#
Ranet-HQ#
%SYS-5-CONFIG_I: Configured from console by console
Ranet-HQ#sh ip protocol
```

```
Routing Protocol is "ospf 1"
  Outgoing update filter list for all interfaces is not set
  Incoming update filter list for all interfaces is not set
  Router ID 1.1.0.1
  Number of areas in this router is 1. 1 normal 0 stub 0 nssa
  Maximum path: 4
  Routing for Networks:
    128.0.6.128 0.0.0.15 area 0
    128.0.6.156 0.0.0.3 area 0
  Routing Information Sources:
    Gateway         Distance      Last Update
  Distance: (default is 110)
```

```
Ranet-HQ#copy run start
Destination filename [startup-config]?
Building configuration...
[OK]
Ranet-HQ#
```

[ตั้งค่าที่ Ranet BR (คลิกที่เครื่อง console)] :

(ไปยังแท็บ Desktop > คลิก Terminal > กด OK)

```
Ranet-BR>en
Ranet-BR#conf t
Enter configuration commands, one per line. End with CNTL/Z.
Ranet-BR(config)#int fa0/0
Ranet-BR(config-if)#no sh
```

```
Ranet-BR(config-if)#
%LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to up
Ranet-BR(config-if)#ip add 128.0.6.150 255.255.255.248
Ranet-BR(config-if)#int s0/0/0
Ranet-BR(config-if)#no sh

%LINK-5-CHANGED: Interface Serial0/0/0, changed state to up
Ranet-BR(config-if)#clock rate 64000
Ranet-BR(config-if)#
%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial0/0/0, changed state to up
Ranet-BR(config-if)#ip add 128.0.6.158 255.255.255.252
Ranet-BR(config-if)#exit
Ranet-BR(config)#int loopback 0

%LINK-5-CHANGED: Interface Loopback0, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface Loopback0, changed state to up
Ranet-BR(config-if)#ip add 1.1.1.1 255.255.255.0
Ranet-BR(config-if)#exit
Ranet-BR(config)#router ospf 100
Ranet-BR(config-router)#network 128.0.6.144 0.0.0.7 area 0
Ranet-BR(config-router)#network 128.0.6.156 0.0.0.3 area 0
Ranet-BR(config-router)#
00:06:09: %OSPF-5-ADJCHG: Process 100, Nbr 1.1.0.1 on Serial0/0/0 from LOADING to FULL, Loading Done
Ranet-BR(config-router)#exit
Ranet-BR(config)#ip route 0.0.0.0 0.0.0.0 se0/0/0
Ranet-BR(config)#
Ranet-BR#
%SYS-5-CONFIG_I: Configured from console by console
Ranet-BR#sh ip protocol

Routing Protocol is "ospf 100"
  Outgoing update filter list for all interfaces is not set
  Incoming update filter list for all interfaces is not set
  Router ID 1.1.1.1
  Number of areas in this router is 1. 1 normal 0 stub 0 nssa
```

Maximum path: 4

Routing for Networks:

128.0.6.144 0.0.0.7 area 0

128.0.6.156 0.0.0.3 area 0

Routing Information Sources:

Gateway	Distance	Last Update
128.0.6.157	110	00:00:20

Distance: (default is 110)

Ranet-BR#sh ip route

Codes: C - connected, S - static, I - IGRP, R - RIP, M - mobile, B - BGP

D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area

N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2

E1 - OSPF external type 1, E2 - OSPF external type 2, E - EGP

i - IS-IS, L1 - IS-IS level-1, L2 - IS-IS level-2, ia - IS-IS inter area

* - candidate default, U - per-user static route, o - ODR

P - periodic downloaded static route

Gateway of last resort is 0.0.0.0 to network 0.0.0.0

1.0.0.0/24 is subnetted, 1 subnets

C 1.1.1.0 is directly connected, Loopback0

128.0.0.0/16 is variably subnetted, 3 subnets, 3 masks

O 128.0.6.128/28 [110/782] via 128.0.6.157, 00:00:29, Serial0/0/0

C 128.0.6.144/29 is directly connected, FastEthernet0/0

C 128.0.6.156/30 is directly connected, Serial0/0/0

S* 0.0.0.0/0 is directly connected, Serial0/0/0

Ranet-BR#copy run start

Destination filename [startup-config]?

Building configuration...

[OK]

Ranet-BR#

[ไปยังเครื่อง Host1] :

(ไปยังแท็บ Desktop > คลิกไอคอน Command Prompt)

Packet Tracer PC Command Line 1.0

```
PC>ping 128.0.6.148
```

```
Pinging 128.0.6.148 with 32 bytes of data:
```

```
Request timed out.
```

```
Reply from 128.0.6.148: bytes=32 time=11ms TTL=126
```

```
Reply from 128.0.6.148: bytes=32 time=12ms TTL=126
```

```
Reply from 128.0.6.148: bytes=32 time=8ms TTL=126
```

```
Ping statistics for 128.0.6.148:
```

```
    Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
```

```
Approximate round trip times in milli-seconds:
```

```
    Minimum = 8ms, Maximum = 12ms, Average = 10ms
```

```
PC>ping 203.87.129.95
```

```
Pinging 203.87.129.95 with 32 bytes of data:
```

```
Request timed out.
```

```
Reply from 203.87.129.95: bytes=32 time=10ms TTL=126
```

```
Reply from 203.87.129.95: bytes=32 time=8ms TTL=126
```

```
Reply from 203.87.129.95: bytes=32 time=10ms TTL=126
```

```
Ping statistics for 203.87.129.95:
```

```
    Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
```

```
Approximate round trip times in milli-seconds:
```

```
    Minimum = 8ms, Maximum = 10ms, Average = 9ms
```

```
PC>
```

[ไปยังเครื่อง Host2] :

(ไปยังแท็บ Desktop > คลิกไอคอน Command Prompt)

```
Packet Tracer PC Command Line 1.0
```

```
PC>ping 128.0.6.130
```

```
Pinging 128.0.6.130 with 32 bytes of data:
```

Reply from 128.0.6.130: bytes=32 time=17ms TTL=126

Reply from 128.0.6.130: bytes=32 time=14ms TTL=126

Reply from 128.0.6.130: bytes=32 time=12ms TTL=126

Reply from 128.0.6.130: bytes=32 time=12ms TTL=126

Ping statistics for 128.0.6.130:

Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),

Approximate round trip times in milli-seconds:

Minimum = 12ms, Maximum = 17ms, Average = 13ms

PC>ping 203.87.129.95

Pinging 203.87.129.95 with 32 bytes of data:

Reply from 203.87.129.95: bytes=32 time=24ms TTL=125

Reply from 203.87.129.95: bytes=32 time=16ms TTL=125

Reply from 203.87.129.95: bytes=32 time=17ms TTL=125

Reply from 203.87.129.95: bytes=32 time=12ms TTL=125

Ping statistics for 203.87.129.95:

Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),

Approximate round trip times in milli-seconds:

Minimum = 12ms, Maximum = 24ms, Average = 17ms

PC>

