10.0.0.10

Physical　Config　**Desktop**　Programming　Attributes

Command Prompt　　　　　　　　　　　　　　　　　　　　　X

```
C:\>
C:\>
C:\>
C:\>
C:\>
C:\>
C:\>
C:\>
C:\>
C:\>
C:\>
C:\>
C:\>tracert 172.17.255.132

Tracing route to 172.17.255.132 over a maximum of 30 hops:

  1    0 ms      0 ms      0 ms      10.0.0.1
  2    0 ms      0 ms      0 ms      172.20.0.2
  3    0 ms      0 ms      0 ms      192.168.16.2
  4    0 ms      0 ms      0 ms      192.168.6.2
  5    0 ms      0 ms      1 ms      172.17.255.132

Trace complete.

C:\>tracert 172.17.255.132

Tracing route to 172.17.255.132 over a maximum of 30 hops:

  1    0 ms      0 ms      0 ms      10.0.0.1
  2    0 ms      0 ms      0 ms      172.20.0.2
  3    0 ms      0 ms      0 ms      172.18.0.2
  4    0 ms      0 ms      0 ms      192.168.6.2
  5    0 ms      0 ms      0 ms      172.17.255.132

Trace complete.

C:\>
```

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IOS Command Line Interface

```
01:10:23: %OSPF-5-ADJCHG: Process 1, Nbr 5.5.5.5 on FastEthernet1/0 from FULL to DOWN,
Neighbor Down: Interface down or detached

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet1/0, changed state to up


Router>en
Router#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 not set

C    10.0.0.0/8 is directly connected, FastEthernet0/0.320
     164.180.0.0/24 is subnetted, 1 subnets
C       164.180.180.0 is directly connected, FastEthernet0/0
O    172.17.0.0/16 [110/4] via 172.20.0.2, 00:02:27, FastEthernet0/1
O    172.18.0.0/16 [110/2] via 172.20.0.2, 00:24:52, FastEthernet0/1
     172.20.0.0/24 is subnetted, 1 subnets
C       172.20.0.0 is directly connected, FastEthernet0/1
O    192.168.6.0/24 [110/3] via 172.20.0.2, 00:02:27, FastEthernet0/1
O    192.168.16.0/24 [110/3] via 172.20.0.2, 00:01:12, FastEthernet0/1
C    192.168.61.0/24 is directly connected, FastEthernet1/0
C    192.168.100.0/24 is directly connected, FastEthernet0/0.300
C    192.168.200.0/24 is directly connected, FastEthernet0/0.330

Router#
Router#
Router#
```

Copy   Paste

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```
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet1/0, changed state to down

Router#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 not set

C    10.0.0.0/8 is directly connected, FastEthernet0/0.320
     164.180.0.0/24 is subnetted, 1 subnets
C       164.180.180.0 is directly connected, FastEthernet0/0
O    172.17.0.0/16 [110/4] via 172.20.0.2, 00:03:13, FastEthernet0/1
O    172.18.0.0/16 [110/2] via 172.20.0.2, 00:25:38, FastEthernet0/1
     172.20.0.0/24 is subnetted, 1 subnets
C       172.20.0.0 is directly connected, FastEthernet0/1
O    192.168.6.0/24 [110/3] via 172.20.0.2, 00:03:13, FastEthernet0/1
C    192.168.100.0/24 is directly connected, FastEthernet0/0.300
C    192.168.200.0/24 is directly connected, FastEthernet0/0.330

Router#
Router#
Router#
Router#
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Router#
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Router#
Router#
Router#
Router#
```

OSPF На роутере:
!
router ospf 123 - включение OSPF процесса на роутре
 router-id 12.12.12.12 - назначение Router-ID на роутере
 network 1.1.1.0 0.0.0.255 area 0 - включение сети 1.1.1.0/24 в OSPF процесс в area 0 (соответственно и интерфейс из
 этой сети включается в процесс OSPF)
 !

Команды для show:
show ip ospf int (brief) - просмотр интерфейсов, включенных в OSPF процесс
show ip ospf nei - просмотр соседей по OSPF
sh ip route ospf - просмотр маршрутов, заинсталлированных в таблицу маршрутизации по протоколу OSPF

VLAN на коммутаторе:
!
vlan 333 - создание влана 333
 name TEST - даем название влану
 !
interface FastEthernet0/1 - настройка порта в режиме Access с вланом 10
 switchport access vlan 10
 switchport mode access
 !
 !
interface GigabitEthernet0/1 - настройка порта в режиме Trunk с вланом 10 и 20
 switchport trunk allowed vlan 10,20
 (switchport trunk allowed vlan add, remove) - добавить, удалить влан из списка
 switchport mode trunk
 !

VLAN на роутере:
!
interface GigabitEthernet0/0/0.10 - создание подинтерфейса на порту GigabitEthernet0/0/0 с ID 10.
 encapsulation dot1Q 10 - включение подинтерфейса GigabitEthernet0/0/0.10 во влан 10.
 no ip address
 !
interface GigabitEthernet0/0/0.20 - создание подинтерфейса на порту GigabitEthernet0/0/0 с ID 20.
 encapsulation dot1Q 20 - включение подинтерфейса GigabitEthernet0/0/0.10 во влан 20.
 no ip address - (не забывайте назначить IP адрес)
 !

Команды для show:
sh vlan
sh int gigabitEthernet 0/1 switchport