Частина 1

Крок 1

b) 2 Гігабітних порта, консольний та порти керування, LAN.

c) 2 WAN, 2 LAN.

d)

```
East>enable
East#show ip interface brief
Interface              IP-Address      OK? Method Status
Protocol
GigabitEthernet0/0     172.30.1.1      YES NVRAM  up                    down
GigabitEthernet0/1     172.31.1.1      YES NVRAM  up                    down
Serial0/0/0            10.10.10.1      YES NVRAM  down                  down
Serial0/0/1            unassigned      YES NVRAM  down                  down
Vlan1                  172.29.1.1      YES NVRAM  up                    down
East#
```

e)

```
East#show interface gigabitethernet 0/0
GigabitEthernet0/0 is up, line protocol is down (disabled)
  Hardware is CN Gigabit Ethernet, address is 0001.4274.a401 (bia
0001.4274.a401)
  Internet address is 172.30.1.1/24
  MTU 1500 bytes, BW 1000000 Kbit, DLY 10 usec,
     reliability 255/255, txload 1/255, rxload 1/255
  Encapsulation ARPA, loopback not set
  Keepalive set (10 sec)
  Full-duplex, 100Mb/s, media type is RJ45
  output flow-control is unsupported, input flow-control is unsupported
  ARP type: ARPA, ARP Timeout 04:00:00,
  Last input 00:00:08, output 00:00:05, output hang never
  Last clearing of "show interface" counters never
  Input queue: 0/75/0 (size/max/drops); Total output drops: 0
  Queueing strategy: fifo
  Output queue :0/40 (size/max)
  5 minute input rate 0 bits/sec, 0 packets/sec
  5 minute output rate 0 bits/sec, 0 packets/sec
     0 packets input, 0 bytes, 0 no buffer
     Received 0 broadcasts, 0 runts, 0 giants, 0 throttles
     0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored, 0 abort
     0 watchdog, 1017 multicast, 0 pause input
     0 input packets with dribble condition detected
```

```
East#show interface serial 0/0/0
Serial0/0/0 is down, line protocol is down (disabled)
  Hardware is HD64570
  Internet address is 10.10.10.1/30
  MTU 1500 bytes, BW 1544 Kbit, DLY 20000 usec,
     reliability 255/255, txload 1/255, rxload 1/255
  Encapsulation HDLC, loopback not set, keepalive set (10 sec)
  Last input never, output never, output hang never
  Last clearing of "show interface" counters never
  Input queue: 0/75/0 (size/max/drops); Total output drops: 0
  Queueing strategy: weighted fair
  Output queue: 0/1000/64/0 (size/max total/threshold/drops)
     Conversations  0/0/256 (active/max active/max total)
     Reserved Conversations 0/0 (allocated/max allocated)
     Available Bandwidth 1158 kilobits/sec
  5 minute input rate 0 bits/sec, 0 packets/sec
  5 minute output rate 0 bits/sec, 0 packets/sec
     0 packets input, 0 bytes, 0 no buffer
     Received 0 broadcasts, 0 runts, 0 giants, 0 throttles
     0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored, 0 abort
     0 packets output, 0 bytes, 0 underruns
     0 output errors, 0 collisions, 1 interface resets
     0 output buffer failures, 0 output buffers swapped out
```

Крок 2

Скільки слотів розширення доступно для приєднання додаткових модулів до маршрутизатора **East**? 1

Натисніть **Switch2**. Скільки слотів розширення доступно? 5

Частина 2

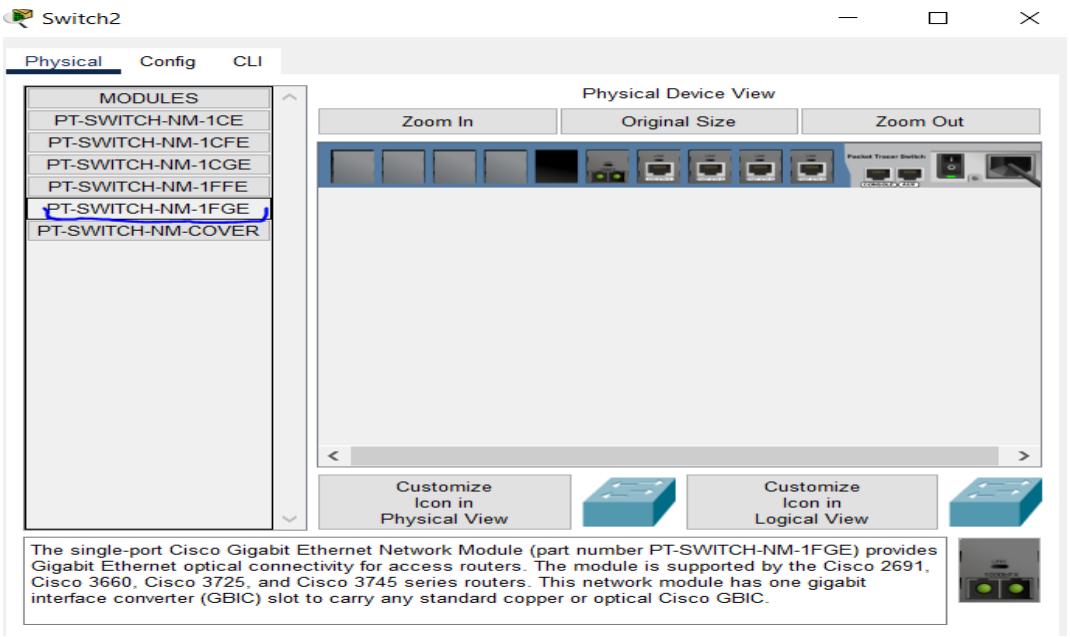
Крок 1

Вам потрібно під'єднати PC 1, 2, та 3 до маршрутизатора **East**, але у вас немає необхідних коштів для придбання нового комутатора. Який модуль можна використати для під'єднання трьох PC до маршрутизатора **Eastr**?

The HWIC-4ESW provides four switching ports.

Скільки хостів можна під'єднати до маршрутизатора за допомогою цього модуля? 4

Який модуль можна вставити, щоб забезпечити гігабітове оптичне з'єднання зі **Switch3**?

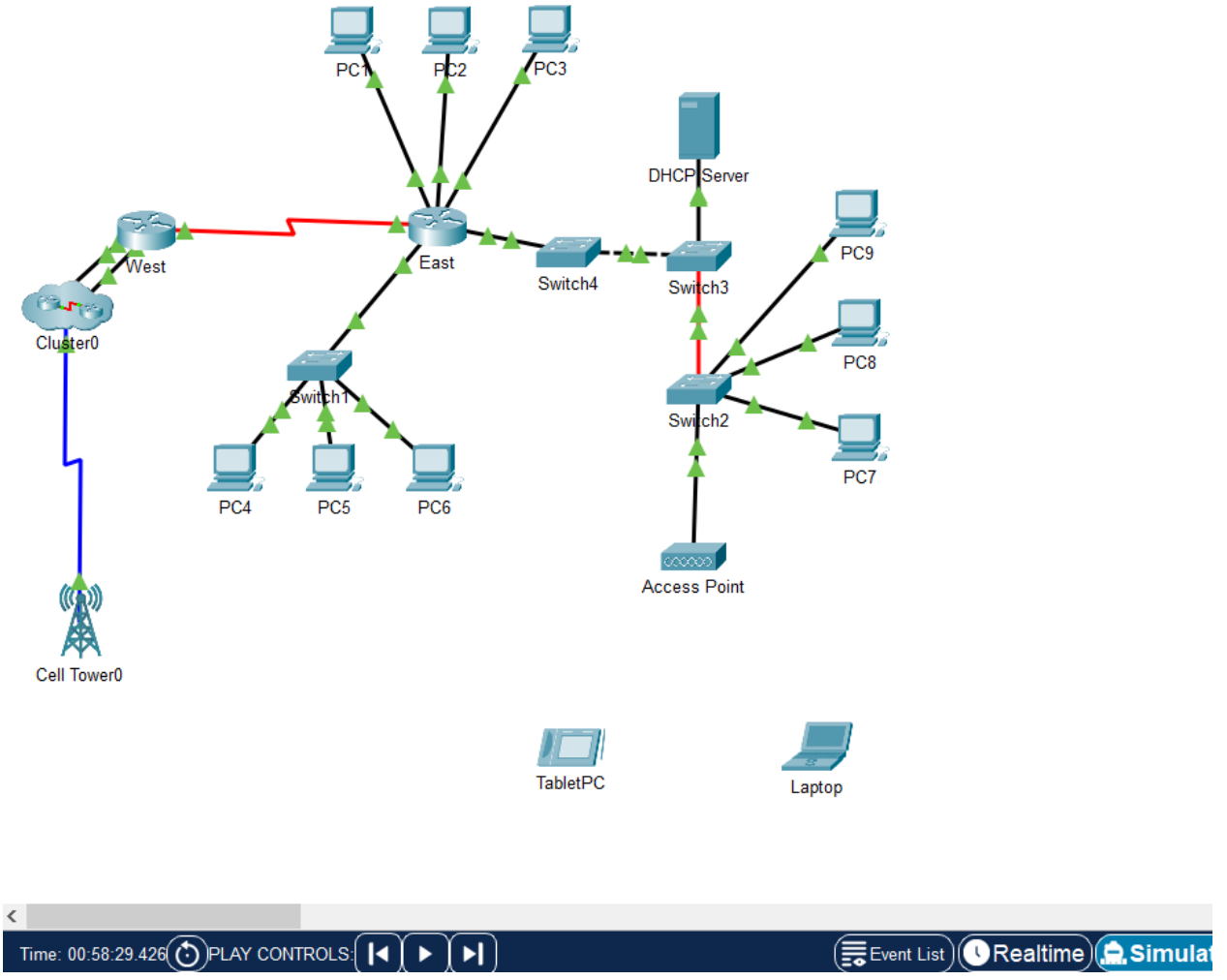


Використовуйте команду **show ip interface brief** на **Switch2**, щоб визначити слот, в який вставлено модуль.

```
Switch2>enable
Switch2#show ip interface brief
Interface              IP-Address      OK? Method Status
Protocol
FastEthernet0/1        unassigned      YES manual down                    down
FastEthernet1/1        unassigned      YES manual down                    down
FastEthernet2/1        unassigned      YES manual down                    down
GigabitEthernet3/1     unassigned      YES manual down                    down
FastEthernet4/1        unassigned      YES manual down                    down
GigabitEthernet5/1     unassigned      YES manual down                    down
Vlan1                  unassigned      YES manual administratively down down
Switch2#
```

У який слот він був вставлений? 5(рахувати з нуля)

Частина 3



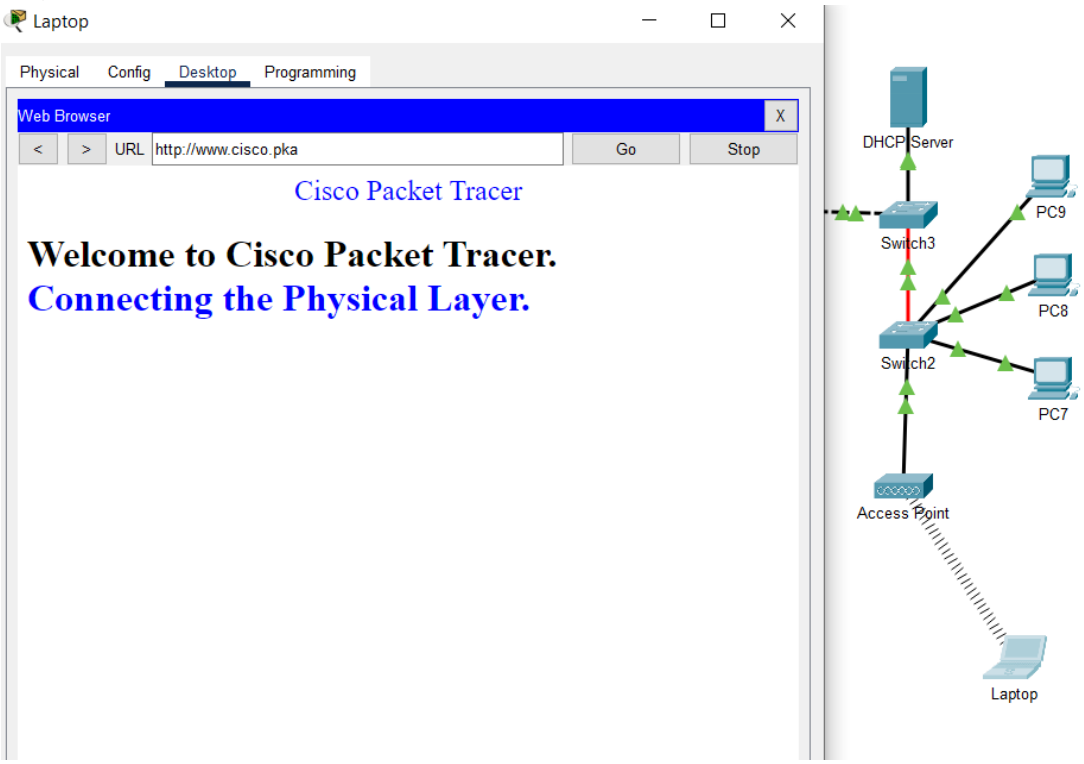
Частина 4

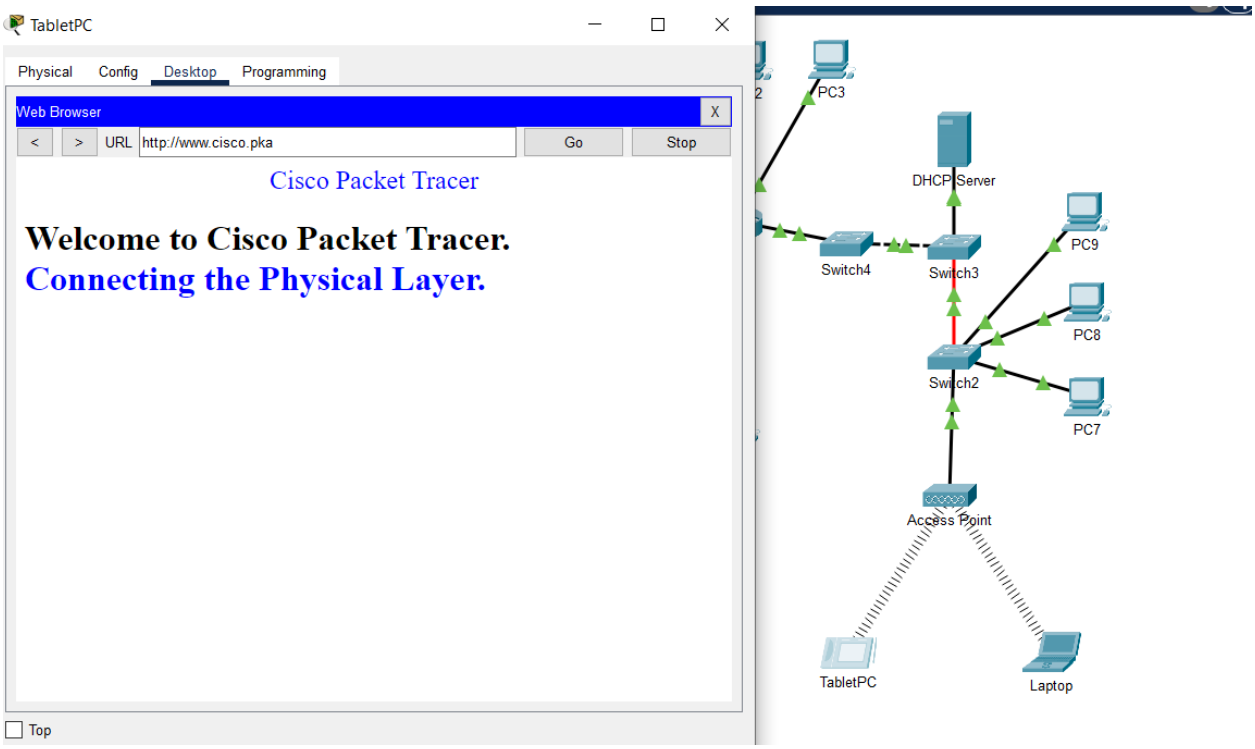
Крок 1

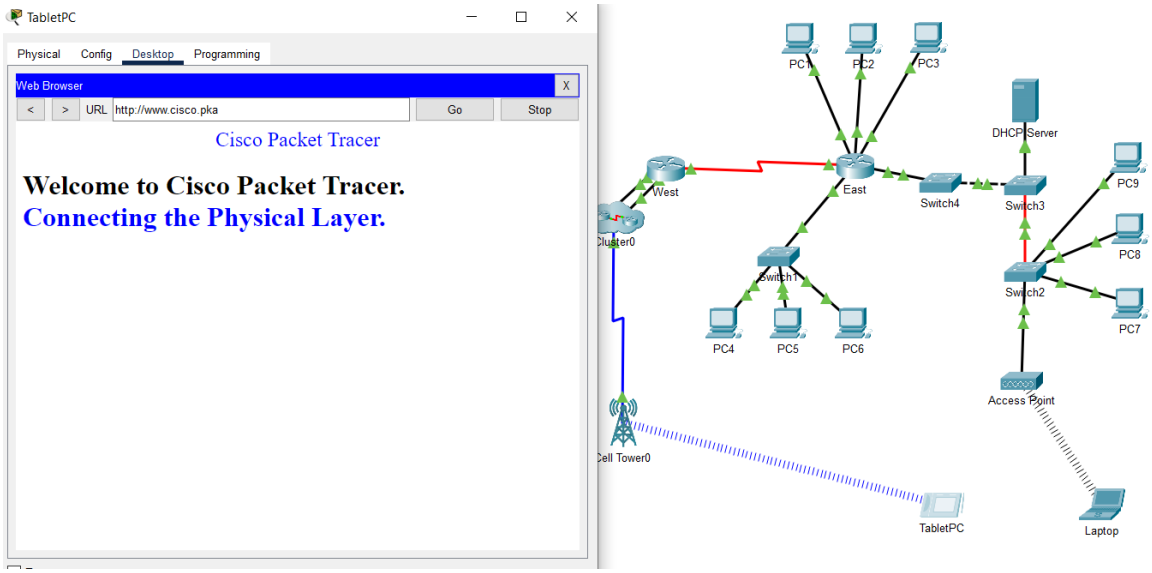
```
East>enable
East#show ip in
East#show ip interface brief
Interface              IP-Address      OK? Method Status
Protocol
GigabitEthernet0/0     172.30.1.1      YES NVRAM  up                    up
GigabitEthernet0/1     172.31.1.1      YES NVRAM  up                    up
Serial0/0/0            10.10.10.1      YES NVRAM  up                    up
Serial0/0/1            unassigned      YES NVRAM  down                  down
FastEthernet0/1/0      unassigned      YES unset  up                    up
FastEthernet0/1/1      unassigned      YES unset  up                    up
FastEthernet0/1/2      unassigned      YES unset  up                    up
FastEthernet0/1/3      unassigned      YES unset  up                    down
Vlan1                  172.29.1.1      YES NVRAM  up                    up
East#
```

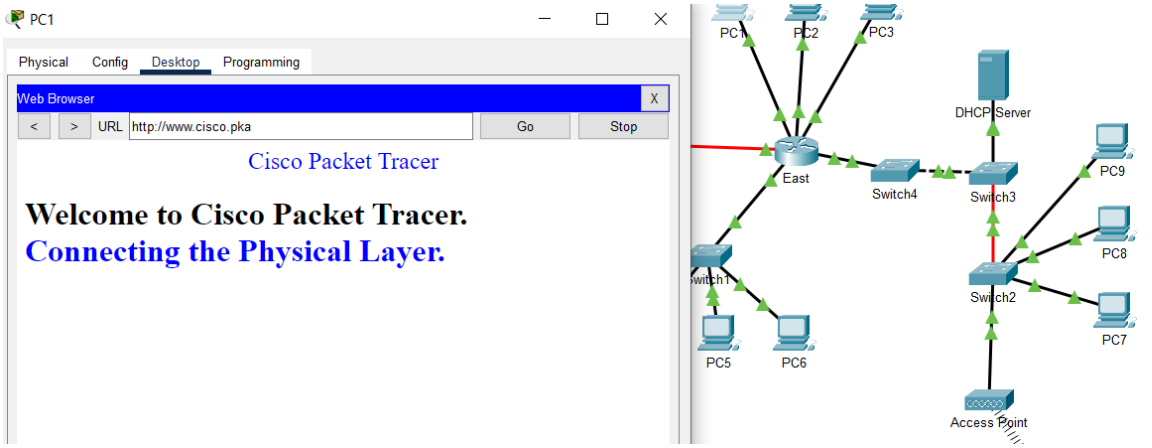
Крок 2

a-d)




TabletPC
Physical
Config
Desktop
Programming
Web Browser
URL
http://www.cisco.pka
Go
Stop
Cisco Packet Tracer
Welcome to Cisco Packet Tracer.
Connecting the Physical Layer.
Top
PC3
DHCP Server
Switch4
Switch3
PC9
PC8
Switch2
PC7
Access Point
TabletPC
Laptop


TabletPC
Physical
Config
Desktop
Programming
Web Browser
URL
http://www.cisco.pka
Go
Stop
Cisco Packet Tracer
Welcome to Cisco Packet Tracer.
Connecting the Physical Layer.
PC1
PC2
PC3
DHCP Server
West
East
Switch4
Switch3
PC9
PC8
Switch1
Switch2
PC7
PC4
PC5
PC6
Access Point
Cell Tower0
TabletPC
Laptop


PC1
Physical
Config
Desktop
Programming
Web Browser
URL
http://www.cisco.pka
Go
Stop
Cisco Packet Tracer
Welcome to Cisco Packet Tracer.
Connecting the Physical Layer.
PC1
PC2
PC3
DHCP Server
East
Switch4
Switch3
PC9
PC8
Switch2
PC7
PC5
PC6
Access Point