CUPRINS

Laborator 1 – Configurarea a două calculatoare folosind cablu cross-over

Stabiliţi o simplă conexiune cross-over între PC 1 şi PC 2
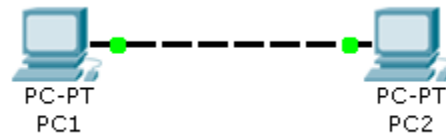
PC1	IP: 192.168.0.1	Subnet Mask: 255.255.255.0
PC2	IP: 192.168.0.2	Subnet Mask: 255.255.255.0

PC1:

Command Line

PC>ipconfig 192.168.0.1 255.255.255.0

PC>ipconfig

IP Address......................: 192.168.0.1
Subnet Mask....................: 255.255.255.0
Default Gateway................: 0.0.0.0

PC2:

Command Line

PC>ipconfig 192.168.0.2 255.255.255.0

PC>ipconfig

IP Address......................: 192.168.0.2
Subnet Mask....................: 255.255.255.0
Default Gateway................: 0.0.0.0

Verificare:

PC1:

PC>ping 192.168.0.2

Pinging 192.168.0.2 with 32 bytes of data:

Reply from 192.168.0.2: bytes=32 time=79ms TTL=128

Reply from 192.168.0.2: bytes=32 time=31ms TTL=128
Reply from 192.168.0.2: bytes=32 time=31ms TTL=128
Reply from 192.168.0.2: bytes=32 time=31ms TTL=128

Ping statistics for 192.168.0.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 31ms, Maximum = 79ms, Average = 43ms

PC2:

PC>ping 192.168.0.1

Pinging 192.168.0.1 with 32 bytes of data:

Reply from 192.168.0.1: bytes=32 time=78ms TTL=128
Reply from 192.168.0.1: bytes=32 time=32ms TTL=128
Reply from 192.168.0.1: bytes=32 time=32ms TTL=128
Reply from 192.168.0.1: bytes=32 time=31ms TTL=128

Ping statistics for 192.168.0.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 31ms, Maximum = 78ms, Average = 43ms

Laborator 2 – Router 1841→ Configurare Interfaţă Serială

Stabiliţi o simplă conexiune serială la serială între Router 1 şi Router 2.

Pe Routerul 1 si Routerul 2 se va instala o interfaţă serială WIC-2T.

Serial R1-DCE	IP: 192.168.1.1	Subnet Mask: 255.255.255.0
Serial R2-DCT	IP: 192.168.1.2	Subnet Mask: 255.255.255.0

R1:

--- System Configuration Dialog ---

Continue with configuration dialog? [yes/no]: **no**
Press RETURN to get started!

Router>
Router>enable
Router#configure terminal

Enter configuration commands, one per line. End with CNTL/Z.

Router(config)#hostname R1
R1(config)#interface serial 0/1/0
R1(config-if)#ip address 192.168.1.1 255.255.255.0
R1(config-if)#clock rate 64000
R1(config-if)#no shutdown

%LINK-5-CHANGED: Interface Serial0/1/0, changed state to down

R1(config-if)#exit
R1(config)#exit

%SYS-5-CONFIG_I: Configured from console by console

R1#
R1#exit

R1 con0 is now available
Press RETURN to get started.

R2:

--- System Configuration Dialog ---

Continue with configuration dialog? [yes/no]: **no**
Press RETURN to get started!

Router>
Router>enable
Router#configure terminal

Enter configuration commands, one per line. End with CNTL/Z.

Router(config)#hostname R2
R2(config)#interface serial 0/1/0
R2(config-if)#ip address 192.168.1.2 255.255.255.0
R2(config-if)#no shutdown

%LINK-5-CHANGED: Interface Serial0/1/0, changed state to down

R2(config-if)#exit
R2(config)#exit

%SYS-5-CONFIG_I: Configured from console by console

R2#
R2#exit

R2 con0 is now available
Press RETURN to get started.

Verificare :

R1:

R1#ping 192.168.1.2

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.1.2, timeout is 2 seconds:
!!!!!

Success rate is 100 percent (5/5), round-trip min/avg/max = 31/31/32 ms
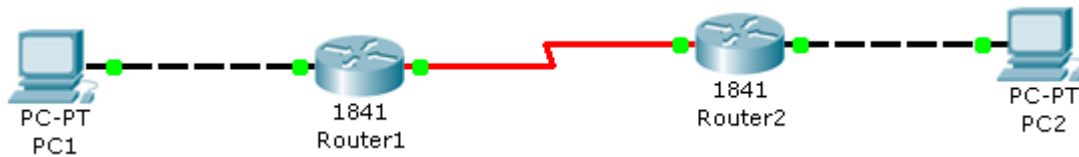

R2:

R2#ping 192.168.1.1

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.1.1, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 31/31/32 ms

Laborator 3 – Router 1841→ Adresare IP

Să se configureze urmatoarea reţea urmărind tabelul anexat.

Pe Routerul 1 si Routerul 2 se va instala o interfaţă serială WIC-2T.
Pe R1.DCE - se configureaza interfaţa serială de viteză 64K.

PC1	IP: 192.168.101.2	Subnet Mask: 255.255.255.0	Default Gateway: 192.168.101.1
PC2	IP: 192.168.100.2	Subnet Mask: 255.255.255.0	Default Gateway: 192.168.100.1
R1 FastEthernet	IP: 192.168.101.1	Subnet Mask: 255.255.255.0	
R2 FastEthernet	IP: 192.168.100.1	Subnet Mask: 255.255.255.0	
Serial R1-DCE	IP: 192.168.1.1	Subnet Mask: 255.255.255.0	
Serial R2-DCT	IP: 192.168.1.2	Subnet Mask: 255.255.255.0	

R1:

--- System Configuration Dialog ---

Continue with configuration dialog? [yes/no]: **no**
Press RETURN to get started!

Router>
Router>enable
Router#configure terminal

Enter configuration commands, one per line. End with CNTL/Z.

Router(config)#hostname R1

R1(config)#interface serial 0/1/0
R1(config-if)#ip address 192.168.1.1 255.255.255.0
R1(config-if)#clock rate 64000
R1(config-if)#no shutdown

%LINK-5-CHANGED: Interface Serial0/1/0, changed state to down

R1(config-if)#exit
R1(config)#exit

%SYS-5-CONFIG_I: Configured from console by console

R1#
R1#exit

R1 con0 is now available
Press RETURN to get started.

R1#enable
R1#configure terminal

Enter configuration commands, one per line. End with CNTL/Z.

R1(config)#interface fastethernet 0/0
R1(config-if)#ip address 192.168.101.1 255.255.255.0
R1(config-if)#no shutdown

%LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state
to up

R1(config-if)#exit
R1(config)#exit

%SYS-5-CONFIG_I: Configured from console by console

R1#exit

R1 con0 is now available
Press RETURN to get started.

R2:

--- System Configuration Dialog ---

Continue with configuration dialog? [yes/no]: **no**
Press RETURN to get started!

Router>
Router>enable
Router#configure terminal

Enter configuration commands, one per line. End with CNTL/Z.

Router(config)#hostname R2
R2(config)#interface serial 0/1/0
R2(config-if)#ip address 192.168.1.2 255.255.255.0
R2(config-if)#no shutdown

%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

R2(config-if)#exit
R2(config)#exit

%SYS-5-CONFIG_I: Configured from console by console

R2#exit

R2 con0 is now available
Press RETURN to get started.

R2>enable
R2#configure terminal

Enter configuration commands, one per line. End with CNTL/Z.

R2(config)#interface fastethernet 0/0
R2(config-if)#ip address 192.168.100.1 255.255.255.0
R2(config-if)#no shutdown

%LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state
to up

R2(config-if)#exit
R2(config)#exit

%SYS-5-CONFIG_I: Configured from console by console

R2#exit

R2 con0 is now available
Press RETURN to get started.

PC1: Command Line

PC>ipconfig 192.168.101.2 255.255.255.0 192.168.101.1
PC>ipconfig

IP Address......................: 192.168.101.2
Subnet Mask.....................: 255.255.255.0
Default Gateway.................: 192.168.101.1

PC2: Command Line

PC>ipconfig 192.168.100.2 255.255.255.0 192.168.100.1
PC>ipconfig

IP Address......................: 192.168.100.2
Subnet Mask.....................: 255.255.255.0
Default Gateway.................: 192.168.100.1

Verificare:

PC2:

PC2>ping 192.168.100.1

Pinging 192.168.100.1 with 32 bytes of data:

Reply from 192.168.100.1: bytes=32 time=32ms TTL=255
Reply from 192.168.100.1: bytes=32 time=31ms TTL=255
Reply from 192.168.100.1: bytes=32 time=31ms TTL=255
Reply from 192.168.100.1: bytes=32 time=32ms TTL=255

Ping statistics for 192.168.100.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 31ms, Maximum = 32ms, Average = 31ms

PC2>ping 192.168.1.2

Pinging 192.168.1.2 with 32 bytes of data:

Reply from 192.168.1.2: bytes=32 time=31ms TTL=255
Reply from 192.168.1.2: bytes=32 time=31ms TTL=255
Reply from 192.168.1.2: bytes=32 time=31ms TTL=255
Reply from 192.168.1.2: bytes=32 time=31ms TTL=255

Ping statistics for 192.168.1.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 31ms, Maximum = 31ms, Average = 31ms

PC2>ping 192.168.1.1

Pinging 192.168.1.1 with 32 bytes of data:

Request timed out.
Request timed out.
Request timed out.
Request timed out.

Ping statistics for 192.168.1.1:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

PC2>ping 192.168.101.1

Pinging 192.168.101.1 with 32 bytes of data:

Reply from 192.168.100.1: Destination host unreachable.
Reply from 192.168.100.1: Destination host unreachable.
Reply from 192.168.100.1: Destination host unreachable.
Reply from 192.168.100.1: Destination host unreachable.

Ping statistics for 192.168.101.1:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

PC2>ping 192.168.101.2

Pinging 192.168.101.2 with 32 bytes of data:

Reply from 192.168.100.1: Destination host unreachable.
Reply from 192.168.100.1: Destination host unreachable.
Reply from 192.168.100.1: Destination host unreachable.
Reply from 192.168.100.1: Destination host unreachable.

Ping statistics for 192.168.101.2:
   Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

R2:

R2>ping 192.168.100.2

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.100.2, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 19/28/31 ms

R2>ping 192.168.1.2

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.1.2, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 62/65/78 ms

R2>ping 192.168.1.1

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.1.1, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 31/31/32 ms

R2>ping 192.168.101.1

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.101.1, timeout is 2 seconds:
.....
Success rate is 0 percent (0/5)

R2>ping 192.168.101.2

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.101.2, timeout is 2 seconds:
.....
Success rate is 0 percent (0/5)

PC1:

PC1>ping 192.168.101.1

Pinging 192.168.101.1 with 32 bytes of data:

Reply from 192.168.101.1: bytes=32 time=31ms TTL=255
Reply from 192.168.101.1: bytes=32 time=31ms TTL=255
Reply from 192.168.101.1: bytes=32 time=31ms TTL=255
Reply from 192.168.101.1: bytes=32 time=31ms TTL=255

Ping statistics for 192.168.101.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 31ms, Maximum = 31ms, Average = 31ms

PC1>ping 192.168.1.1

Pinging 192.168.1.1 with 32 bytes of data:

Reply from 192.168.1.1: bytes=32 time=31ms TTL=255
Reply from 192.168.1.1: bytes=32 time=31ms TTL=255
Reply from 192.168.1.1: bytes=32 time=46ms TTL=255
Reply from 192.168.1.1: bytes=32 time=31ms TTL=255

Ping statistics for 192.168.1.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 31ms, Maximum = 46ms, Average = 34ms

PC1>ping 192.168.1.2

Pinging 192.168.1.2 with 32 bytes of data:

Request timed out.
Request timed out.
Request timed out.
Request timed out.

Ping statistics for 192.168.1.2:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

PC1>ping 192.168.100.1

Pinging 192.168.100.1 with 32 bytes of data:

Reply from 192.168.101.1: Destination host unreachable.
Reply from 192.168.101.1: Destination host unreachable.
Reply from 192.168.101.1: Destination host unreachable.
Reply from 192.168.101.1: Destination host unreachable.

Ping statistics for 192.168.100.1:
   Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

PC1>ping 192.168.100.2

Pinging 192.168.100.2 with 32 bytes of data:

Reply from 192.168.101.1: Destination host unreachable.
Reply from 192.168.101.1: Destination host unreachable.
Reply from 192.168.101.1: Destination host unreachable.
Reply from 192.168.101.1: Destination host unreachable.

Ping statistics for 192.168.100.2:
   Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

R1:

R1>ping 192.168.101.2

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.101.2, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 31/34/47 ms

R1>ping 192.168.1.1

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.1.1, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 62/62/63 ms

R1>ping 192.168.1.2

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.1.2, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 31/31/32 ms

R1>ping 192.168.100.1

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.100.1, timeout is 2 seconds:
.....
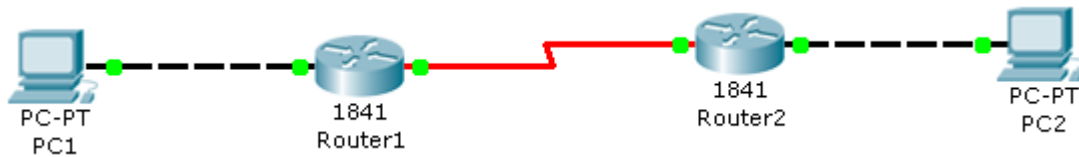Success rate is 0 percent (0/5)

R1>ping 192.168.100.2

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.100.2, timeout is 2 seconds:
.....
Success rate is 0 percent (0/5)

Laborator 4 – Router 1841→ Rute Statice

Să se configureze urmatoarea reţea urmărind tabelul anexat.

Pe Routerul 1 si Routerul 2 se va instala o interfaţă serială WIC-2T.
Pe R1.DCE - se configureaza interfaţa serială de viteză 64K.

PC1	IP: 192.168.101.2	Subnet Mask: 255.255.255.0	Default Gateway: 192.168.101.1
PC2	IP: 192.168.100.2	Subnet Mask: 255.255.255.0	Default Gateway: 192.168.100.1
R1 FastEthernet	IP: 192.168.101.1	Subnet Mask: 255.255.255.0	
R2 FastEthernet	IP: 192.168.100.1	Subnet Mask: 255.255.255.0	
Serial R1-DCE	IP: 192.168.1.1	Subnet Mask: 255.255.255.0	
Serial R2-DCT	IP: 192.168.1.2	Subnet Mask: 255.255.255.0	
IP route R1	192.168.100.0 255.255.255.0 192.168.1.2		
IP route R2	192.168.101.0 255.255.255.0 192.168.1.1		

R1:

--- System Configuration Dialog ---

Continue with configuration dialog? [yes/no]: **no**
Press RETURN to get started!

Router>
Router>enable
Router#configure terminal

Enter configuration commands, one per line. End with CNTL/Z.

Router(config)#hostname R1

R1(config)#interface serial 0/1/0
R1(config-if)#ip address 192.168.1.1 255.255.255.0
R1(config-if)#clock rate 64000
R1(config-if)#no shutdown
R1(config-if)#ip route 192.168.100.0 255.255.255.0 192.168.1.2
%LINK-5-CHANGED: Interface Serial0/1/0, changed state to down

R1(config-if)#exit
R1(config)#exit

%SYS-5-CONFIG_I: Configured from console by console

R1#
R1#exit

R1 con0 is now available
Press RETURN to get started.

R1#enable
R1#configure terminal

Enter configuration commands, one per line. End with CNTL/Z.

R1(config)#interface fastethernet 0/0
R1(config-if)#ip address 192.168.101.1 255.255.255.0
R1(config-if)#no shutdown

%LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state
to up

R1(config-if)#exit
R1(config)#exit

%SYS-5-CONFIG_I: Configured from console by console

R1#exit

R1 con0 is now available
Press RETURN to get started.

R2:

--- System Configuration Dialog ---

Continue with configuration dialog? [yes/no]: **no**
Press RETURN to get started!

Router>
Router>enable
Router#configure terminal

Enter configuration commands, one per line. End with CNTL/Z.

Router(config)#hostname R2
R2(config)#interface serial 0/1/0
R2(config-if)#ip address 192.168.1.2 255.255.255.0
R2(config-if)#no shutdown
R2(config-if)#ip route 192.168.101.0 255.255.255.0 192.168.1.1

%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

R2(config-if)#exit
R2(config)#exit

%SYS-5-CONFIG_I: Configured from console by console

R2#exit

R2 con0 is now available
Press RETURN to get started.

R2>enable
R2#configure terminal

Enter configuration commands, one per line. End with CNTL/Z.

R2(config)#interface fastethernet 0/0
R2(config-if)#ip address 192.168.100.1 255.255.255.0
R2(config-if)#no shutdown

%LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to up

R2(config-if)#exit
R2(config)#exit

%SYS-5-CONFIG_I: Configured from console by console

R2#exit

R2 con0 is now available
Press RETURN to get started.

PC1: Command Line

PC>ipconfig 192.168.101.2 255.255.255.0 192.168.101.1
PC>ipconfig

IP Address......................: 192.168.101.2
Subnet Mask....................: 255.255.255.0
Default Gateway................: 192.168.101.1

PC2: Command Line

PC>ipconfig 192.168.100.2 255.255.255.0 192.168.100.1
PC>ipconfig

IP Address......................: 192.168.100.2
Subnet Mask....................: 255.255.255.0
Default Gateway................: 192.168.100.1

Verificare:

PC2:

PC2>ping 192.168.100.1

Pinging 192.168.100.1 with 32 bytes of data:

Reply from 192.168.100.1: bytes=32 time=32ms TTL=255
Reply from 192.168.100.1: bytes=32 time=31ms TTL=255
Reply from 192.168.100.1: bytes=32 time=31ms TTL=255
Reply from 192.168.100.1: bytes=32 time=32ms TTL=255

Ping statistics for 192.168.100.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 31ms, Maximum = 32ms, Average = 31ms

PC2>ping 192.168.1.2

Pinging 192.168.1.2 with 32 bytes of data:

Reply from 192.168.1.2: bytes=32 time=31ms TTL=255
Reply from 192.168.1.2: bytes=32 time=31ms TTL=255
Reply from 192.168.1.2: bytes=32 time=31ms TTL=255
Reply from 192.168.1.2: bytes=32 time=31ms TTL=255

Ping statistics for 192.168.1.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 31ms, Maximum = 31ms, Average = 31ms

PC2>ping 192.168.1.1

Pinging 192.168.1.1 with 32 bytes of data:

Reply from 192.168.1.1: bytes=32 time=48ms TTL=254
Reply from 192.168.1.1: bytes=32 time=63ms TTL=254
Reply from 192.168.1.1: bytes=32 time=63ms TTL=254
Reply from 192.168.1.1: bytes=32 time=62ms TTL=254

Ping statistics for 192.168.1.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 48ms, Maximum = 63ms, Average = 59ms

PC2>ping 192.168.101.1

Pinging 192.168.101.1 with 32 bytes of data:

Reply from 192.168.101.1: bytes=32 time=63ms TTL=254
Reply from 192.168.101.1: bytes=32 time=63ms TTL=254
Reply from 192.168.101.1: bytes=32 time=62ms TTL=254
Reply from 192.168.101.1: bytes=32 time=62ms TTL=254

Ping statistics for 192.168.101.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 62ms, Maximum = 63ms, Average = 62ms

PC2>ping 192.168.101.2

Pinging 192.168.101.2 with 32 bytes of data:

Reply from 192.168.101.2: bytes=32 time=110ms TTL=126
Reply from 192.168.101.2: bytes=32 time=94ms TTL=126
Reply from 192.168.101.2: bytes=32 time=94ms TTL=126
Reply from 192.168.101.2: bytes=32 time=78ms TTL=126

Ping statistics for 192.168.101.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 78ms, Maximum = 110ms, Average = 94ms

R2:

R2>ping 192.168.100.2

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.100.2, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 19/28/31 ms

R2>ping 192.168.1.2

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.1.2, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 62/65/78 ms

R2>ping 192.168.1.1

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.1.1, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 31/31/32 ms

R2>ping 192.168.101.1

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.101.1, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 31/31/32 ms

R2>ping 192.168.101.2

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.101.2, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 47/60/78 ms

PC1:

PC1>ping 192.168.101.1

Pinging 192.168.101.1 with 32 bytes of data:

Reply from 192.168.101.1: bytes=32 time=31ms TTL=255
Reply from 192.168.101.1: bytes=32 time=31ms TTL=255
Reply from 192.168.101.1: bytes=32 time=31ms TTL=255
Reply from 192.168.101.1: bytes=32 time=31ms TTL=255

Ping statistics for 192.168.101.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 31ms, Maximum = 31ms, Average = 31ms

PC1>ping 192.168.1.1

Pinging 192.168.1.1 with 32 bytes of data:

Reply from 192.168.1.1: bytes=32 time=31ms TTL=255
Reply from 192.168.1.1: bytes=32 time=31ms TTL=255
Reply from 192.168.1.1: bytes=32 time=46ms TTL=255
Reply from 192.168.1.1: bytes=32 time=31ms TTL=255

Ping statistics for 192.168.1.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 31ms, Maximum = 46ms, Average = 34ms

PC1>ping 192.168.1.2

Pinging 192.168.1.2 with 32 bytes of data:

Reply from 192.168.1.2: bytes=32 time=62ms TTL=254

Reply from 192.168.1.2: bytes=32 time=63ms TTL=254
Reply from 192.168.1.2: bytes=32 time=63ms TTL=254
Reply from 192.168.1.2: bytes=32 time=63ms TTL=254

Ping statistics for 192.168.1.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 62ms, Maximum = 63ms, Average = 62ms

PC1>ping 192.168.100.1

Pinging 192.168.100.1 with 32 bytes of data:

Reply from 192.168.100.1: bytes=32 time=62ms TTL=254
Reply from 192.168.100.1: bytes=32 time=78ms TTL=254
Reply from 192.168.100.1: bytes=32 time=62ms TTL=254
Reply from 192.168.100.1: bytes=32 time=63ms TTL=254

Ping statistics for 192.168.100.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 62ms, Maximum = 78ms, Average = 66ms

PC1>ping 192.168.100.2

Pinging 192.168.100.2 with 32 bytes of data:

Reply from 192.168.100.2: bytes=32 time=94ms TTL=126
Reply from 192.168.100.2: bytes=32 time=109ms TTL=126
Reply from 192.168.100.2: bytes=32 time=80ms TTL=126
Reply from 192.168.100.2: bytes=32 time=94ms TTL=126

Ping statistics for 192.168.100.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 80ms, Maximum = 109ms, Average = 94ms

R1:

R1>ping 192.168.101.2

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.101.2, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 31/34/47 ms

R1>ping 192.168.1.1

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.1.1, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 62/62/63 ms

R1>ping 192.168.1.2

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.1.2, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 31/31/32 ms

R1>ping 192.168.100.1

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.100.1, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 31/31/32 ms
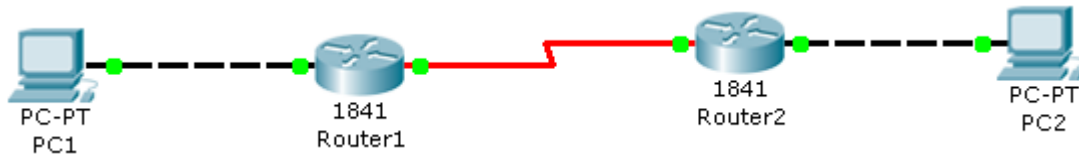
R1>ping 192.168.100.2

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.100.2, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 62/62/63 ms

Laborator 5 – Router 1841 → Rute Statice Standard

Să se configureze urmatoarea reţea urmărind tabelul anexat.

Pe Routerul 1 si Routerul 2 se va instala o interfaţă serială WIC-2T.
Pe R1.DCE - se configureaza interfaţa serială de viteză 64K.

PC1	IP: 192.168.101.2	Subnet Mask: 255.255.255.0	Default Gateway: 192.168.101.1
PC2	IP: 192.168.100.2	Subnet Mask: 255.255.255.0	Default Gateway: 192.168.100.1
R1 FastEthernet	IP: 192.168.101.1	Subnet Mask: 255.255.255.0	
R2 FastEthernet	IP: 192.168.100.1	Subnet Mask: 255.255.255.0	
Serial R1-DCE	IP: 192.168.1.1	Subnet Mask: 255.255.255.0	
Serial R2-DCT	IP: 192.168.1.2	Subnet Mask: 255.255.255.0	
IP route R1	0.0.0.0 0.0.0.0 192.168.1.2		
IP route R2	0.0.0.0 0.0.0.0 192.168.1.1		

R1:

--- System Configuration Dialog ---

Continue with configuration dialog? [yes/no]: **no**
Press RETURN to get started!

Router>
Router>enable
Router#configure terminal

Enter configuration commands, one per line. End with CNTL/Z.

Router(config)#hostname R1
R1(config)#interface serial 0/1/0
R1(config-if)#ip address 192.168.1.1 255.255.255.0
R1(config-if)#clock rate 64000
R1(config-if)#no shutdown
R1(config-if)#ip route 0.0.0.0 0.0.0.0 192.168.1.2

%LINK-5-CHANGED: Interface Serial0/1/0, changed state to down

R1(config-if)#exit
R1(config)#exit

%SYS-5-CONFIG_I: Configured from console by console

R1#
R1#exit

R1 con0 is now available
Press RETURN to get started.

R1#enable
R1#configure terminal

Enter configuration commands, one per line. End with CNTL/Z.

R1(config)#interface fastethernet 0/0
R1(config-if)#ip address 192.168.101.1 255.255.255.0
R1(config-if)#no shutdown

%LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state
to up

R1(config-if)#exit
R1(config)#exit

%SYS-5-CONFIG_I: Configured from console by console

R1#exit

R1 con0 is now available
Press RETURN to get started.

R2:

--- System Configuration Dialog ---

Continue with configuration dialog? [yes/no]: **no**
Press RETURN to get started!

Router>
Router>enable
Router#configure terminal

Enter configuration commands, one per line. End with CNTL/Z.

Router(config)#hostname R2
R2(config)#interface serial 0/1/0
R2(config-if)#ip address 192.168.1.2 255.255.255.0
R2(config-if)#no shutdown
R2(config-if)#ip route 0.0.0.0 0.0.0.0 192.168.1.1

%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

R2(config-if)#exit
R2(config)#exit

%SYS-5-CONFIG_I: Configured from console by console

R2#exit

R2 con0 is now available
Press RETURN to get started.

R2>enable
R2#configure terminal

Enter configuration commands, one per line. End with CNTL/Z.

R2(config)#interface fastethernet 0/0
R2(config-if)#ip address 192.168.100.1 255.255.255.0
R2(config-if)#no shutdown

%LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to up

R2(config-if)#exit
R2(config)#exit

%SYS-5-CONFIG_I: Configured from console by console

R2#exit

R2 con0 is now available
Press RETURN to get started.

PC1: Command Line

PC>ipconfig 192.168.101.2 255.255.255.0 192.168.101.1
PC>ipconfig

IP Address......................: 192.168.101.2
Subnet Mask.....................: 255.255.255.0
Default Gateway.................: 192.168.101.1

PC2: Command Line

PC>ipconfig 192.168.100.2 255.255.255.0 192.168.100.1
PC>ipconfig

IP Address......................: 192.168.100.2
Subnet Mask.....................: 255.255.255.0
Default Gateway.................: 192.168.100.1

Verificare:

PC2:

PC2>ping 192.168.100.1

Pinging 192.168.100.1 with 32 bytes of data:

Reply from 192.168.100.1: bytes=32 time=32ms TTL=255
Reply from 192.168.100.1: bytes=32 time=31ms TTL=255
Reply from 192.168.100.1: bytes=32 time=31ms TTL=255
Reply from 192.168.100.1: bytes=32 time=32ms TTL=255

Ping statistics for 192.168.100.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),

Approximate round trip times in milli-seconds:
    Minimum = 31ms, Maximum = 32ms, Average = 31ms

PC2>ping 192.168.1.2

Pinging 192.168.1.2 with 32 bytes of data:

Reply from 192.168.1.2: bytes=32 time=31ms TTL=255
Reply from 192.168.1.2: bytes=32 time=31ms TTL=255
Reply from 192.168.1.2: bytes=32 time=31ms TTL=255
Reply from 192.168.1.2: bytes=32 time=31ms TTL=255

Ping statistics for 192.168.1.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 31ms, Maximum = 31ms, Average = 31ms

PC2>ping 192.168.1.1

Pinging 192.168.1.1 with 32 bytes of data:

Reply from 192.168.1.1: bytes=32 time=48ms TTL=254
Reply from 192.168.1.1: bytes=32 time=63ms TTL=254
Reply from 192.168.1.1: bytes=32 time=63ms TTL=254
Reply from 192.168.1.1: bytes=32 time=62ms TTL=254

Ping statistics for 192.168.1.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 48ms, Maximum = 63ms, Average = 59ms

PC2>ping 192.168.101.1

Pinging 192.168.101.1 with 32 bytes of data:

Reply from 192.168.101.1: bytes=32 time=63ms TTL=254
Reply from 192.168.101.1: bytes=32 time=63ms TTL=254
Reply from 192.168.101.1: bytes=32 time=62ms TTL=254
Reply from 192.168.101.1: bytes=32 time=62ms TTL=254

Ping statistics for 192.168.101.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 62ms, Maximum = 63ms, Average = 62ms

PC2>ping 192.168.101.2

Pinging 192.168.101.2 with 32 bytes of data:

Reply from 192.168.101.2: bytes=32 time=110ms TTL=126
Reply from 192.168.101.2: bytes=32 time=94ms TTL=126
Reply from 192.168.101.2: bytes=32 time=94ms TTL=126
Reply from 192.168.101.2: bytes=32 time=78ms TTL=126

Ping statistics for 192.168.101.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 78ms, Maximum = 110ms, Average = 94ms

R2:

R2>ping 192.168.100.2

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.100.2, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 19/28/31 ms

R2>ping 192.168.1.2

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.1.2, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 62/65/78 ms

R2>ping 192.168.1.1

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.1.1, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 31/31/32 ms

R2>ping 192.168.101.1

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.101.1, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 31/31/32 ms

R2>ping 192.168.101.2

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.101.2, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 47/60/78 ms

PC1:

PC1>ping 192.168.101.1

Pinging 192.168.101.1 with 32 bytes of data:

Reply from 192.168.101.1: bytes=32 time=31ms TTL=255
Reply from 192.168.101.1: bytes=32 time=31ms TTL=255
Reply from 192.168.101.1: bytes=32 time=31ms TTL=255
Reply from 192.168.101.1: bytes=32 time=31ms TTL=255

Ping statistics for 192.168.101.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 31ms, Maximum = 31ms, Average = 31ms

PC1>ping 192.168.1.1

Pinging 192.168.1.1 with 32 bytes of data:

Reply from 192.168.1.1: bytes=32 time=31ms TTL=255
Reply from 192.168.1.1: bytes=32 time=31ms TTL=255
Reply from 192.168.1.1: bytes=32 time=46ms TTL=255
Reply from 192.168.1.1: bytes=32 time=31ms TTL=255

Ping statistics for 192.168.1.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 31ms, Maximum = 46ms, Average = 34ms

PC1>ping 192.168.1.2

Pinging 192.168.1.2 with 32 bytes of data:

Reply from 192.168.1.2: bytes=32 time=62ms TTL=254

Reply from 192.168.1.2: bytes=32 time=63ms TTL=254
Reply from 192.168.1.2: bytes=32 time=63ms TTL=254
Reply from 192.168.1.2: bytes=32 time=63ms TTL=254

Ping statistics for 192.168.1.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 62ms, Maximum = 63ms, Average = 62ms

PC1>ping 192.168.100.1

Pinging 192.168.100.1 with 32 bytes of data:

Reply from 192.168.100.1: bytes=32 time=62ms TTL=254
Reply from 192.168.100.1: bytes=32 time=78ms TTL=254
Reply from 192.168.100.1: bytes=32 time=62ms TTL=254
Reply from 192.168.100.1: bytes=32 time=63ms TTL=254

Ping statistics for 192.168.100.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 62ms, Maximum = 78ms, Average = 66ms

PC1>ping 192.168.100.2

Pinging 192.168.100.2 with 32 bytes of data:

Reply from 192.168.100.2: bytes=32 time=94ms TTL=126
Reply from 192.168.100.2: bytes=32 time=109ms TTL=126
Reply from 192.168.100.2: bytes=32 time=80ms TTL=126
Reply from 192.168.100.2: bytes=32 time=94ms TTL=126

Ping statistics for 192.168.100.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 80ms, Maximum = 109ms, Average = 94ms

R1:

R1>ping 192.168.101.2

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.101.2, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 31/34/47 ms

R1>ping 192.168.1.1

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.1.1, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 62/62/63 ms

R1>ping 192.168.1.2

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.1.2, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 31/31/32 ms

R1>ping 192.168.100.1

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.100.1, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 31/31/32 ms
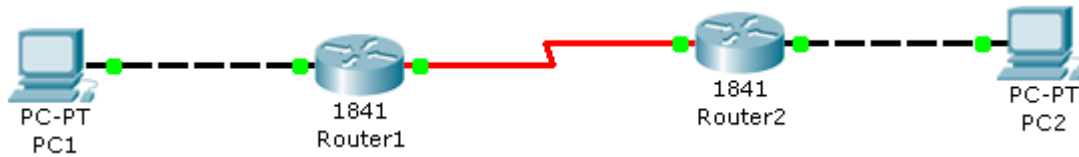
R1>ping 192.168.100.2

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.100.2, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 62/62/63 ms

Laborator 6 – Router 1841→ Rute RIP

Să se configureze urmatoarea reţea urmărind tabelul anexat.

Pe Routerul 1 si Routerul 2 se va instala o interfaţă serială WIC-2T.
Pe R1.DCE - se configureaza interfaţa serială de viteză 64K.

PC1	IP: 192.168.101.2	Subnet Mask: 255.255.255.0	Default Gateway: 192.168.101.1
PC2	IP: 192.168.100.2	Subnet Mask: 255.255.255.0	Default Gateway: 192.168.100.1
R1 FastEthernet	IP: 192.168.101.1	Subnet Mask: 255.255.255.0	
R2 FastEthernet	IP: 192.168.100.1	Subnet Mask: 255.255.255.0	
Serial R1-DCE	IP: 192.168.1.1	Subnet Mask: 255.255.255.0	
Serial R2-DCT	IP: 192.168.1.2	Subnet Mask: 255.255.255.0	
Router Rip R1	network 192.168.1.0 network 192.168.101.0		
Router Rip R2	network 192.168.1.0 network 192.168.100.0		

R1:

--- System Configuration Dialog ---

Continue with configuration dialog? [yes/no]: **no**
Press RETURN to get started!

Router>
Router>enable
Router#configure terminal

Enter configuration commands, one per line. End with CNTL/Z.

Router(config)#hostname R1
R1(config)#interface serial 0/1/0
R1(config-if)#ip address 192.168.1.1 255.255.255.0
R1(config-if)#clock rate 64000
R1(config-if)#no shutdown
R1(config-if)#router rip
R1(config-router)#network 192.168.1.0
R1(config-router)#network 192.168.101.0

%LINK-5-CHANGED: Interface Serial0/1/0, changed state to down

R1(config-if)#exit
R1(config)#exit

%SYS-5-CONFIG_I: Configured from console by console

R1#
R1#exit

R1 con0 is now available
Press RETURN to get started.

R1#enable
R1#configure terminal

Enter configuration commands, one per line. End with CNTL/Z.

R1(config)#interface fastethernet 0/0
R1(config-if)#ip address 192.168.101.1 255.255.255.0
R1(config-if)#no shutdown

%LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state
to up

R1(config-if)#exit
R1(config)#exit

%SYS-5-CONFIG_I: Configured from console by console

R1#exit

R1 con0 is now available
Press RETURN to get started.

R2:

--- System Configuration Dialog ---

Continue with configuration dialog? [yes/no]: **no**
Press RETURN to get started!

Router>
Router>enable
Router#configure terminal

Enter configuration commands, one per line. End with CNTL/Z.

Router(config)#hostname R2
R2(config)#interface serial 0/1/0
R2(config-if)#ip address 192.168.1.2 255.255.255.0
R2(config-if)#no shutdown
R2(config-if)#router rip
R2(config-router)#network 192.168.1.0
R2(config-router)#network 192.168.100.0

%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

R2(config-if)#exit
R2(config)#exit

%SYS-5-CONFIG_I: Configured from console by console

R2#exit

R2 con0 is now available
Press RETURN to get started.

R2>enable
R2#configure terminal

Enter configuration commands, one per line. End with CNTL/Z.

R2(config)#interface fastethernet 0/0
R2(config-if)#ip address 192.168.100.1 255.255.255.0
R2(config-if)#no shutdown

%LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to up

R2(config-if)#exit
R2(config)#exit

%SYS-5-CONFIG_I: Configured from console by console

R2#exit

R2 con0 is now available
Press RETURN to get started.

PC1: Command Line

PC>ipconfig 192.168.101.2 255.255.255.0 192.168.101.1
PC>ipconfig

IP Address......................: 192.168.101.2
Subnet Mask.....................: 255.255.255.0
Default Gateway.................: 192.168.101.1

PC2: Command Line

PC>ipconfig 192.168.100.2 255.255.255.0 192.168.100.1
PC>ipconfig

IP Address......................: 192.168.100.2
Subnet Mask.....................: 255.255.255.0
Default Gateway.................: 192.168.100.1

Verificare:

PC2:

PC2>ping 192.168.100.1

Pinging 192.168.100.1 with 32 bytes of data:

Reply from 192.168.100.1: bytes=32 time=32ms TTL=255

Reply from 192.168.100.1: bytes=32 time=31ms TTL=255
Reply from 192.168.100.1: bytes=32 time=31ms TTL=255
Reply from 192.168.100.1: bytes=32 time=32ms TTL=255

Ping statistics for 192.168.100.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 31ms, Maximum = 32ms, Average = 31ms

PC2>ping 192.168.1.2

Pinging 192.168.1.2 with 32 bytes of data:

Reply from 192.168.1.2: bytes=32 time=31ms TTL=255
Reply from 192.168.1.2: bytes=32 time=31ms TTL=255
Reply from 192.168.1.2: bytes=32 time=31ms TTL=255
Reply from 192.168.1.2: bytes=32 time=31ms TTL=255

Ping statistics for 192.168.1.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 31ms, Maximum = 31ms, Average = 31ms

PC2>ping 192.168.1.1

Pinging 192.168.1.1 with 32 bytes of data:

Reply from 192.168.1.1: bytes=32 time=48ms TTL=254
Reply from 192.168.1.1: bytes=32 time=63ms TTL=254
Reply from 192.168.1.1: bytes=32 time=63ms TTL=254
Reply from 192.168.1.1: bytes=32 time=62ms TTL=254

Ping statistics for 192.168.1.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 48ms, Maximum = 63ms, Average = 59ms

PC2>ping 192.168.101.1

Pinging 192.168.101.1 with 32 bytes of data:

Reply from 192.168.101.1: bytes=32 time=63ms TTL=254
Reply from 192.168.101.1: bytes=32 time=63ms TTL=254
Reply from 192.168.101.1: bytes=32 time=62ms TTL=254

Reply from 192.168.101.1: bytes=32 time=62ms TTL=254

Ping statistics for 192.168.101.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 62ms, Maximum = 63ms, Average = 62ms

PC2>ping 192.168.101.2

Pinging 192.168.101.2 with 32 bytes of data:

Reply from 192.168.101.2: bytes=32 time=110ms TTL=126
Reply from 192.168.101.2: bytes=32 time=94ms TTL=126
Reply from 192.168.101.2: bytes=32 time=94ms TTL=126
Reply from 192.168.101.2: bytes=32 time=78ms TTL=126

Ping statistics for 192.168.101.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 78ms, Maximum = 110ms, Average = 94ms

R2:

R2>ping 192.168.100.2

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.100.2, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 19/28/31 ms

R2>ping 192.168.1.2

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.1.2, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 62/65/78 ms

R2>ping 192.168.1.1

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.1.1, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 31/31/32 ms

R2>ping 192.168.101.1

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.101.1, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 31/31/32 ms

R2>ping 192.168.101.2

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.101.2, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 47/60/78 ms

PC1:

PC1>ping 192.168.101.1

Pinging 192.168.101.1 with 32 bytes of data:

Reply from 192.168.101.1: bytes=32 time=31ms TTL=255
Reply from 192.168.101.1: bytes=32 time=31ms TTL=255
Reply from 192.168.101.1: bytes=32 time=31ms TTL=255
Reply from 192.168.101.1: bytes=32 time=31ms TTL=255

Ping statistics for 192.168.101.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 31ms, Maximum = 31ms, Average = 31ms

PC1>ping 192.168.1.1

Pinging 192.168.1.1 with 32 bytes of data:

Reply from 192.168.1.1: bytes=32 time=31ms TTL=255
Reply from 192.168.1.1: bytes=32 time=31ms TTL=255
Reply from 192.168.1.1: bytes=32 time=46ms TTL=255
Reply from 192.168.1.1: bytes=32 time=31ms TTL=255

Ping statistics for 192.168.1.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 31ms, Maximum = 46ms, Average = 34ms

PC1>ping 192.168.1.2

Pinging 192.168.1.2 with 32 bytes of data:

Reply from 192.168.1.2: bytes=32 time=62ms TTL=254
Reply from 192.168.1.2: bytes=32 time=63ms TTL=254
Reply from 192.168.1.2: bytes=32 time=63ms TTL=254
Reply from 192.168.1.2: bytes=32 time=63ms TTL=254

Ping statistics for 192.168.1.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 62ms, Maximum = 63ms, Average = 62ms

PC1>ping 192.168.100.1

Pinging 192.168.100.1 with 32 bytes of data:

Reply from 192.168.100.1: bytes=32 time=62ms TTL=254
Reply from 192.168.100.1: bytes=32 time=78ms TTL=254
Reply from 192.168.100.1: bytes=32 time=62ms TTL=254
Reply from 192.168.100.1: bytes=32 time=63ms TTL=254

Ping statistics for 192.168.100.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 62ms, Maximum = 78ms, Average = 66ms

PC1>ping 192.168.100.2

Pinging 192.168.100.2 with 32 bytes of data:

Reply from 192.168.100.2: bytes=32 time=94ms TTL=126
Reply from 192.168.100.2: bytes=32 time=109ms TTL=126
Reply from 192.168.100.2: bytes=32 time=80ms TTL=126
Reply from 192.168.100.2: bytes=32 time=94ms TTL=126

Ping statistics for 192.168.100.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 80ms, Maximum = 109ms, Average = 94ms

R1:

R1>ping 192.168.101.2

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.101.2, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 31/34/47 ms

R1>ping 192.168.1.1

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.1.1, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 62/62/63 ms

R1>ping 192.168.1.2

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.1.2, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 31/31/32 ms

R1>ping 192.168.100.1

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.100.1, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 31/31/32 ms
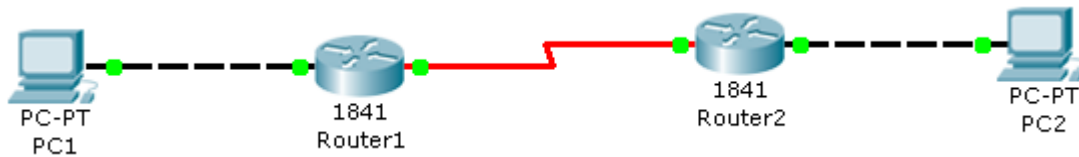
R1>ping 192.168.100.2

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.100.2, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 62/62/63 ms

Laborator 7 – Router 1841→ Configurare Interfață Loopback

Să se configureze urmatoarea reţea urmărind tabelul anexat.

Pe Routerul 1 si Routerul 2 se va instala o interfaţă serială WIC-2T.
Pe R1.DCE - se configureaza interfaţa serială de viteză 64K.

	IP:	Subnet Mask:	Default Gateway:
PC1	IP: 192.168.101.2	Subnet Mask: 255.255.255.0	Default Gateway: 192.168.101.1
PC2	IP: 192.168.100.2	Subnet Mask: 255.255.255.0	Default Gateway: 192.168.100.1
R1 FastEthernet	IP: 192.168.101.1	Subnet Mask: 255.255.255.0	
R2 FastEthernet	IP: 192.168.100.1	Subnet Mask: 255.255.255.0	
Serial R1-DCE	IP: 192.168.1.1	Subnet Mask: 255.255.255.0	
Serial R2-DCT	IP: 192.168.1.2	Subnet Mask: 255.255.255.0	
Interface loopback0 R1	10.1.1.1 255.255.255.0		
Router RIP R1	network 192.168.1.0 network 192.168.101.0 network 10.0.0.0		
Router RIP R2	network 192.168.1.0 network 192.168.100.0		

R1:

--- System Configuration Dialog ---

Continue with configuration dialog? [yes/no]: **no**
Press RETURN to get started!

Router>
Router>enable

Router#configure terminal

Enter configuration commands, one per line. End with CNTL/Z.

Router(config)#hostname R1
R1(config)#interface serial 0/1/0
R1(config-if)#ip address 192.168.1.1 255.255.255.0
R1(config-if)#clock rate 64000
R1(config-if)#no shutdown
R1(config-if)#Interface loopback0
R1(config-if)#ip address 10.1.1.1 255.255.255.0
R1(config-if)#no shutdown
R1(config-if)#router rip
R1(config-router)#network 192.168.1.0
R1(config-router)#network 192.168.101.0
R1(config-router)#network 10.0.0.0

%LINK-5-CHANGED: Interface Serial0/1/0, changed state to down

R1(config-if)#exit
R1(config)#exit

%SYS-5-CONFIG_I: Configured from console by console

R1#
R1#exit

R1 con0 is now available
Press RETURN to get started.

R1#enable
R1#configure terminal

Enter configuration commands, one per line. End with CNTL/Z.

R1(config)#interface fastethernet 0/0
R1(config-if)#ip address 192.168.101.1 255.255.255.0
R1(config-if)#no shutdown

%LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state
to up

R1(config-if)#exit
R1(config)#exit

%SYS-5-CONFIG_I: Configured from console by console

R1#exit

R1 con0 is now available
Press RETURN to get started.

R2:

--- System Configuration Dialog ---

Continue with configuration dialog? [yes/no]: **no**
Press RETURN to get started!

Router>
Router>enable
Router#configure terminal

Enter configuration commands, one per line. End with CNTL/Z.

Router(config)#hostname R2
R2(config)#interface serial 0/1/0
R2(config-if)#ip address 192.168.1.2 255.255.255.0
R2(config-if)#no shutdown
R2(config-if)#router rip
R2(config-router)#network 192.168.1.0
R2(config-router)#network 192.168.100.0

%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

R2(config-if)#exit
R2(config)#exit

%SYS-5-CONFIG_I: Configured from console by console

R2#exit

R2 con0 is now available
Press RETURN to get started.

R2>enable
R2#configure terminal

Enter configuration commands, one per line. End with CNTL/Z.

R2(config)#interface fastethernet 0/0
R2(config-if)#ip address 192.168.100.1 255.255.255.0
R2(config-if)#no shutdown

%LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state
to up

R2(config-if)#exit
R2(config)#exit

%SYS-5-CONFIG_I: Configured from console by console

R2#exit

R2 con0 is now available
Press RETURN to get started.

PC1: Command Line

PC>ipconfig 192.168.101.2 255.255.255.0 192.168.101.1
PC>ipconfig

IP Address......................: 192.168.101.2
Subnet Mask.....................: 255.255.255.0
Default Gateway.................: 192.168.101.1

PC2: Command Line

PC>ipconfig 192.168.100.2 255.255.255.0 192.168.100.1
PC>ipconfig

IP Address......................: 192.168.100.2
Subnet Mask.....................: 255.255.255.0
Default Gateway.................: 192.168.100.1

Verificare:

PC2:

PC2>ping 192.168.100.1

Pinging 192.168.100.1 with 32 bytes of data:

Reply from 192.168.100.1: bytes=32 time=32ms TTL=255
Reply from 192.168.100.1: bytes=32 time=31ms TTL=255
Reply from 192.168.100.1: bytes=32 time=31ms TTL=255
Reply from 192.168.100.1: bytes=32 time=32ms TTL=255

Ping statistics for 192.168.100.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 31ms, Maximum = 32ms, Average = 31ms

PC2>ping 192.168.1.2

Pinging 192.168.1.2 with 32 bytes of data:

Reply from 192.168.1.2: bytes=32 time=31ms TTL=255
Reply from 192.168.1.2: bytes=32 time=31ms TTL=255
Reply from 192.168.1.2: bytes=32 time=31ms TTL=255
Reply from 192.168.1.2: bytes=32 time=31ms TTL=255

Ping statistics for 192.168.1.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 31ms, Maximum = 31ms, Average = 31ms

PC2>ping 192.168.1.1

Pinging 192.168.1.1 with 32 bytes of data:

Reply from 192.168.1.1: bytes=32 time=48ms TTL=254
Reply from 192.168.1.1: bytes=32 time=63ms TTL=254
Reply from 192.168.1.1: bytes=32 time=63ms TTL=254
Reply from 192.168.1.1: bytes=32 time=62ms TTL=254

Ping statistics for 192.168.1.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),

Approximate round trip times in milli-seconds:
    Minimum = 48ms, Maximum = 63ms, Average = 59ms

PC2>ping 192.168.101.1

Pinging 192.168.101.1 with 32 bytes of data:

Reply from 192.168.101.1: bytes=32 time=63ms TTL=254
Reply from 192.168.101.1: bytes=32 time=63ms TTL=254
Reply from 192.168.101.1: bytes=32 time=62ms TTL=254
Reply from 192.168.101.1: bytes=32 time=62ms TTL=254

Ping statistics for 192.168.101.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 62ms, Maximum = 63ms, Average = 62ms

PC2>ping 192.168.101.2

Pinging 192.168.101.2 with 32 bytes of data:

Reply from 192.168.101.2: bytes=32 time=110ms TTL=126
Reply from 192.168.101.2: bytes=32 time=94ms TTL=126
Reply from 192.168.101.2: bytes=32 time=94ms TTL=126
Reply from 192.168.101.2: bytes=32 time=78ms TTL=126

Ping statistics for 192.168.101.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 78ms, Maximum = 110ms, Average = 94ms

PC2>ping 10.1.1.1

Pinging 10.1.1.1 with 32 bytes of data:

Reply from 10.1.1.1: bytes=32 time=48ms TTL=254
Reply from 10.1.1.1: bytes=32 time=62ms TTL=254
Reply from 10.1.1.1: bytes=32 time=62ms TTL=254
Reply from 10.1.1.1: bytes=32 time=62ms TTL=254

Ping statistics for 10.1.1.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 48ms, Maximum = 62ms, Average = 58ms

R2:

R2>ping 192.168.100.2

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.100.2, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 19/28/31 ms

R2>ping 192.168.1.2

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.1.2, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 62/65/78 ms

R2>ping 192.168.1.1

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.1.1, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 31/31/32 ms

R2>ping 192.168.101.1

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.101.1, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 31/31/32 ms

R2>ping 192.168.101.2

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.101.2, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 47/60/78 ms

R2>ping 10.1.1.1

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 10.1.1.1, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 31/37/47 ms

PC1:

PC1>ping 192.168.101.1

Pinging 192.168.101.1 with 32 bytes of data:

Reply from 192.168.101.1: bytes=32 time=31ms TTL=255
Reply from 192.168.101.1: bytes=32 time=31ms TTL=255
Reply from 192.168.101.1: bytes=32 time=31ms TTL=255
Reply from 192.168.101.1: bytes=32 time=31ms TTL=255

Ping statistics for 192.168.101.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 31ms, Maximum = 31ms, Average = 31ms

PC1>ping 192.168.1.1

Pinging 192.168.1.1 with 32 bytes of data:

Reply from 192.168.1.1: bytes=32 time=31ms TTL=255
Reply from 192.168.1.1: bytes=32 time=31ms TTL=255
Reply from 192.168.1.1: bytes=32 time=46ms TTL=255
Reply from 192.168.1.1: bytes=32 time=31ms TTL=255

Ping statistics for 192.168.1.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 31ms, Maximum = 46ms, Average = 34ms

PC1>ping 192.168.1.2

Pinging 192.168.1.2 with 32 bytes of data:

Reply from 192.168.1.2: bytes=32 time=62ms TTL=254
Reply from 192.168.1.2: bytes=32 time=63ms TTL=254
Reply from 192.168.1.2: bytes=32 time=63ms TTL=254
Reply from 192.168.1.2: bytes=32 time=63ms TTL=254

Ping statistics for 192.168.1.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 62ms, Maximum = 63ms, Average = 62ms

PC1>ping 192.168.100.1

Pinging 192.168.100.1 with 32 bytes of data:

Reply from 192.168.100.1: bytes=32 time=62ms TTL=254
Reply from 192.168.100.1: bytes=32 time=78ms TTL=254
Reply from 192.168.100.1: bytes=32 time=62ms TTL=254
Reply from 192.168.100.1: bytes=32 time=63ms TTL=254

Ping statistics for 192.168.100.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 62ms, Maximum = 78ms, Average = 66ms

PC1>ping 192.168.100.2

Pinging 192.168.100.2 with 32 bytes of data:

Reply from 192.168.100.2: bytes=32 time=94ms TTL=126
Reply from 192.168.100.2: bytes=32 time=109ms TTL=126
Reply from 192.168.100.2: bytes=32 time=80ms TTL=126
Reply from 192.168.100.2: bytes=32 time=94ms TTL=126

Ping statistics for 192.168.100.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 80ms, Maximum = 109ms, Average = 94ms

PC1>ping 10.1.1.1

Pinging 10.1.1.1 with 32 bytes of data:

Reply from 10.1.1.1: bytes=32 time=79ms TTL=255
Reply from 10.1.1.1: bytes=32 time=32ms TTL=255
Reply from 10.1.1.1: bytes=32 time=32ms TTL=255
Reply from 10.1.1.1: bytes=32 time=31ms TTL=255

Ping statistics for 10.1.1.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 31ms, Maximum = 79ms, Average = 43ms

R1:

R1>ping 192.168.101.2

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.101.2, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 31/34/47 ms

R1>ping 192.168.1.1

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.1.1, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 62/62/63 ms

R1>ping 192.168.1.2

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.1.2, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 31/31/32 ms

R1>ping 192.168.100.1

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.100.1, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 31/31/32 ms

R1>ping 192.168.100.2

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.100.2, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 62/62/63 ms
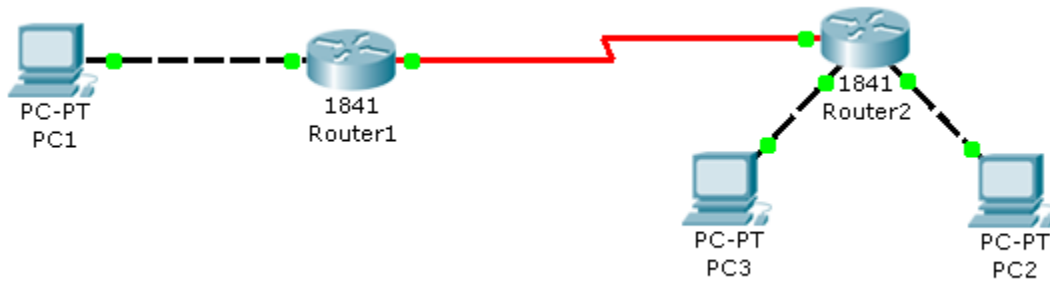
R1>ping 10.1.1.1

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 10.1.1.1, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 0/9/16 ms

Laborator 8 – Router 1841→ Configurare Liste de Acces cu RIP

Să se configureze urmatoarea reţea urmărind tabelul anexat.

Pe Routerul 1 si Routerul 2 se va instala o interfaţă serială WIC-2T.
Pe R1.DCE – se configureaza interfaţa serială de viteză 64K.

PC1	IP: 192.168.101.2	Subnet Mask: 255.255.255.0	Default Gateway: 192.168.101.1
PC2	IP: 192.168.100.2	Subnet Mask: 255.255.255.0	Default Gateway: 192.168.100.1
PC3	IP: 192.168.102.1	Subnet Mask: 255.255.255.0	Default Gateway: 192.168.102.1
R1 FastEthernet	IP: 192.168.101.1	Subnet Mask: 255.255.255.0	
R2 FastEthernet 0/0	IP: 192.168.100.1	Subnet Mask: 255.255.255.0	
R2 FastEthernet 0/1	IP: 192.168.102.1	Subnet Mask: 255.255.255.0	
Serial R1-DCE	IP: 192.168.1.1	Subnet Mask: 255.255.255.0	
Serial R2-DCT	IP: 192.168.1.2	Subnet Mask: 255.255.255.0	
Interface Ethernet R1	ip address 192.168.100.1 255.255.255.0 ip access-group 10 in		
Interface Serial R1	access-list 10 deny 192.168.100.2 0.0.0.0 access-list 10 permit any		
Router RIP R1	network 192.168.1.0 network 192.168.101.0 network 192.168.102.0		
Router RIP R2	network 192.168.1.0 network 192.168.100.0 network 192.168.102.0		

R1:

--- System Configuration Dialog ---

Continue with configuration dialog? [yes/no]: **no**
Press RETURN to get started!

Router>
Router>enable
Router#configure terminal

Enter configuration commands, one per line. End with CNTL/Z.

Router(config)#hostname R1
R1(config)#interface serial 0/1/0
R1(config-if)#ip address 192.168.1.1 255.255.255.0
R1(config-if)#clock rate 64000
R1(config-if)#no shutdown
R1(config-if)#router rip
R1(config-router)#network 192.168.1.0
R1(config-router)#network 192.168.101.0

%LINK-5-CHANGED: Interface Serial0/1/0, changed state to down

R1(config-if)#exit
R1(config)#exit

%SYS-5-CONFIG_I: Configured from console by console

R1#
R1#exit

R1 con0 is now available
Press RETURN to get started.

R1#enable
R1#configure terminal

Enter configuration commands, one per line. End with CNTL/Z.

R1(config)#interface fastethernet 0/0
R1(config-if)#ip address 192.168.101.1 255.255.255.0
R1(config-if)#no shutdown

%LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to up

R1(config-if)#exit
R1(config)#exit

%SYS-5-CONFIG_I: Configured from console by console

R1#exit

R1 con0 is now available
Press RETURN to get started.

R2:

--- System Configuration Dialog ---

Continue with configuration dialog? [yes/no]: **no**
Press RETURN to get started!

Router>
Router>enable
Router#configure terminal

Enter configuration commands, one per line. End with CNTL/Z.

Router(config)#hostname R2
R2(config)#interface serial 0/1/0
R2(config-if)#ip address 192.168.1.2 255.255.255.0
R2(config-if)#no shutdown
R2(config-if)#router rip
R2(config-router)#network 192.168.1.0
R2(config-router)#network 192.168.100.0
R2(config-router)#network 192.168.102.0
R2(config-if)#access-list 10 deny 192.168.100.2 0.0.0.0
R2(config)#access-list 10 permit any

%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

R2(config-if)#exit
R2(config)#exit

%SYS-5-CONFIG_I: Configured from console by console

R2#exit

R2 con0 is now available
Press RETURN to get started.

R2>enable
R2#configure terminal

Enter configuration commands, one per line. End with CNTL/Z.

R2(config)#interface fastethernet 0/0
R2(config-if)#ip address 192.168.100.1 255.255.255.0
R2(config-if)#ip access-group 10 in
R2(config)#interface fastethernet 0/1
R2(config-if)#ip address 192.168.102.1 255.255.255.0
R2(config-if)#no shutdown

%LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state
to up

R2(config-if)#exit
R2(config)#exit

%SYS-5-CONFIG_I: Configured from console by console

R2#exit

R2 con0 is now available
Press RETURN to get started.

PC1: Command Line

PC>ipconfig 192.168.101.2 255.255.255.0 192.168.101.1
PC>ipconfig

IP Address.......................: 192.168.101.2
Subnet Mask.....................: 255.255.255.0
Default Gateway.................: 192.168.101.1

PC2: Command Line

PC>ipconfig 192.168.100.2 255.255.255.0 192.168.100.1
PC>ipconfig

IP Address.......................: 192.168.100.2
Subnet Mask.....................: 255.255.255.0
Default Gateway.................: 192.168.100.1

PC3: Command Line

PC>ipconfig 192.168.102.2 255.255.255.0 192.168.102.1
PC>ipconfig

IP Address.......................: 192.168.102.2
Subnet Mask.....................: 255.255.255.0
Default Gateway.................: 192.168.102.1

Verificare:

PC2:

PC2>ping 192.168.100.1

Pinging 192.168.100.1 with 32 bytes of data:

Request timed out.
Request timed out.
Request timed out.
Request timed out.

Ping statistics for 192.168.100.1:
   Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

PC2>ping 192.168.102.1

Pinging 192.168.102.1 with 32 bytes of data:

Request timed out.
Request timed out.
Request timed out.

Request timed out.

Ping statistics for 192.168.102.1:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

PC2>ping 192.168.102.2

Pinging 192.168.102.2 with 32 bytes of data:

Request timed out.
Request timed out.
Request timed out.
Request timed out.

Ping statistics for 192.168.102.2:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

PC2>ping 192.168.1.2

Pinging 192.168.1.2 with 32 bytes of data:

Request timed out.
Request timed out.
Request timed out.
Request timed out.

Ping statistics for 192.168.1.2:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

PC2>ping 192.168.1.1

Pinging 192.168.1.1 with 32 bytes of data:

Request timed out.
Request timed out.
Request timed out.
Request timed out.

Ping statistics for 192.168.1.1:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

PC2>ping 192.168.101.1

Pinging 192.168.101.1 with 32 bytes of data:

Request timed out.

Request timed out.
Request timed out.
Request timed out.

Ping statistics for 192.168.101.1:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

PC2>ping 192.168.101.2

Pinging 192.168.101.2 with 32 bytes of data:

Request timed out.
Request timed out.
Request timed out.
Request timed out.

Ping statistics for 192.168.101.2:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

PC3:

PC3>ping 192.168.100.2

Pinging 192.168.100.2 with 32 bytes of data:

Request timed out.
Request timed out.
Request timed out.
Request timed out.

Ping statistics for 192.168.100.2:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

PC3>ping 192.168.100.1

Pinging 192.168.100.1 with 32 bytes of data:

Reply from 192.168.100.1: bytes=32 time=31ms TTL=255
Reply from 192.168.100.1: bytes=32 time=31ms TTL=255
Reply from 192.168.100.1: bytes=32 time=32ms TTL=255
Reply from 192.168.100.1: bytes=32 time=31ms TTL=255

Ping statistics for 192.168.100.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 31ms, Maximum = 32ms, Average = 31ms

PC3>ping 192.168.1.2

Pinging 192.168.1.2 with 32 bytes of data:

Reply from 192.168.1.2: bytes=32 time=32ms TTL=255
Reply from 192.168.1.2: bytes=32 time=31ms TTL=255
Reply from 192.168.1.2: bytes=32 time=32ms TTL=255
Reply from 192.168.1.2: bytes=32 time=32ms TTL=255

Ping statistics for 192.168.1.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 31ms, Maximum = 32ms, Average = 31ms

PC3>ping 192.168.1.1

Pinging 192.168.1.1 with 32 bytes of data:

Reply from 192.168.1.1: bytes=32 time=63ms TTL=254
Reply from 192.168.1.1: bytes=32 time=62ms TTL=254
Reply from 192.168.1.1: bytes=32 time=63ms TTL=254
Reply from 192.168.1.1: bytes=32 time=63ms TTL=254

Ping statistics for 192.168.1.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 62ms, Maximum = 63ms, Average = 62ms

PC3>ping 192.168.102.1

Pinging 192.168.102.1 with 32 bytes of data:

Reply from 192.168.102.1: bytes=32 time=31ms TTL=255
Reply from 192.168.102.1: bytes=32 time=19ms TTL=255
Reply from 192.168.102.1: bytes=32 time=32ms TTL=255
Reply from 192.168.102.1: bytes=32 time=31ms TTL=255

Ping statistics for 192.168.102.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 19ms, Maximum = 32ms, Average = 28ms

PC3>ping 192.168.101.1

Pinging 192.168.101.1 with 32 bytes of data:

Reply from 192.168.101.1: bytes=32 time=62ms TTL=254
Reply from 192.168.101.1: bytes=32 time=62ms TTL=254
Reply from 192.168.101.1: bytes=32 time=47ms TTL=254
Reply from 192.168.101.1: bytes=32 time=62ms TTL=254

Ping statistics for 192.168.101.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 47ms, Maximum = 62ms, Average = 58ms

PC3>ping 192.168.101.2

Pinging 192.168.101.2 with 32 bytes of data:

Reply from 192.168.101.2: bytes=32 time=94ms TTL=126
Reply from 192.168.101.2: bytes=32 time=94ms TTL=126
Reply from 192.168.101.2: bytes=32 time=94ms TTL=126
Reply from 192.168.101.2: bytes=32 time=78ms TTL=126

Ping statistics for 192.168.101.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 78ms, Maximum = 94ms, Average = 90ms

R2:

R2>ping 192.168.100.2

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.100.2, timeout is 2 seconds:
.....
Success rate is 0 percent (0/5)

R2>ping 192.168.102.1

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.102.1, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 16/16/16 ms

R2>ping 192.168.102.2

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.102.2, timeout is 2 seconds:
!!!!!

Success rate is 100 percent (5/5), round-trip min/avg/max = 31/31/32 ms

R2>ping 192.168.1.2

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.1.2, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 62/65/78 ms

R2>ping 192.168.1.1

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.1.1, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 31/31/32 ms

R2>ping 192.168.101.1

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.101.1, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 31/31/32 ms

R2>ping 192.168.101.2

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.101.2, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 47/60/78 ms

PC1:

PC1>ping 192.168.101.1

Pinging 192.168.101.1 with 32 bytes of data:

Reply from 192.168.101.1: bytes=32 time=31ms TTL=255
Reply from 192.168.101.1: bytes=32 time=31ms TTL=255
Reply from 192.168.101.1: bytes=32 time=31ms TTL=255
Reply from 192.168.101.1: bytes=32 time=31ms TTL=255

Ping statistics for 192.168.101.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),

Approximate round trip times in milli-seconds:
    Minimum = 31ms, Maximum = 31ms, Average = 31ms

PC1>ping 192.168.1.1

Pinging 192.168.1.1 with 32 bytes of data:

Reply from 192.168.1.1: bytes=32 time=31ms TTL=255
Reply from 192.168.1.1: bytes=32 time=31ms TTL=255
Reply from 192.168.1.1: bytes=32 time=46ms TTL=255
Reply from 192.168.1.1: bytes=32 time=31ms TTL=255

Ping statistics for 192.168.1.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 31ms, Maximum = 46ms, Average = 34ms

PC1>ping 192.168.1.2

Pinging 192.168.1.2 with 32 bytes of data:

Reply from 192.168.1.2: bytes=32 time=62ms TTL=254
Reply from 192.168.1.2: bytes=32 time=63ms TTL=254
Reply from 192.168.1.2: bytes=32 time=63ms TTL=254
Reply from 192.168.1.2: bytes=32 time=63ms TTL=254

Ping statistics for 192.168.1.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 62ms, Maximum = 63ms, Average = 62ms

PC1>ping 192.168.100.1

Pinging 192.168.100.1 with 32 bytes of data:

Reply from 192.168.100.1: bytes=32 time=62ms TTL=254
Reply from 192.168.100.1: bytes=32 time=78ms TTL=254
Reply from 192.168.100.1: bytes=32 time=62ms TTL=254
Reply from 192.168.100.1: bytes=32 time=63ms TTL=254

Ping statistics for 192.168.100.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 62ms, Maximum = 78ms, Average = 66ms

PC1>ping 192.168.100.2

Pinging 192.168.100.2 with 32 bytes of data:

Request timed out.
Request timed out.
Request timed out.
Request timed out.

Ping statistics for 192.168.100.2:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

R1:

R1>ping 192.168.101.2

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.101.2, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 31/34/47 ms

R1>ping 192.168.1.1

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.1.1, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 62/62/63 ms

R1>ping 192.168.1.2

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.1.2, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 31/31/32 ms

R1>ping 192.168.100.1

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.100.1, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 31/31/32 ms
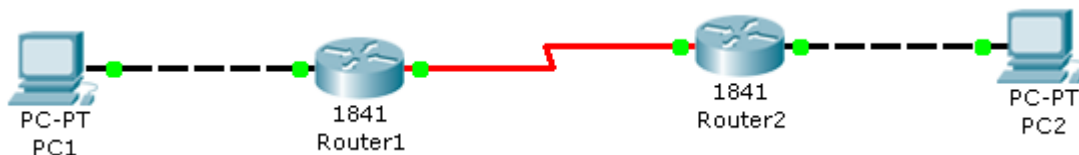
R1>ping 192.168.100.2

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.100.2, timeout is 2 seconds:
.....
Success rate is 0 percent (0/5)

Laborator 9 – Router 1841→ Rute OSPF

Să se configureze urmatoarea reţea urmărind tabelul anexat.

Pe Routerul 1 si Routerul 2 se va instala o interfaţă serială WIC-2T.
Pe R1.DCE - se configureaza interfaţa serială de viteză 64K.

PC1	IP: 192.168.101.2	Subnet Mask: 255.255.255.0	Default Gateway: 192.168.101.1
PC2	IP: 192.168.100.2	Subnet Mask: 255.255.255.0	Default Gateway: 192.168.100.1
R1 FastEthernet	IP: 192.168.101.1	Subnet Mask: 255.255.255.0	
R2 FastEthernet	IP: 192.168.100.1	Subnet Mask: 255.255.255.0	
Serial R1-DCE	IP: 192.168.1.1	Subnet Mask: 255.255.255.0	
Serial R2-DCT	IP: 192.168.1.2	Subnet Mask: 255.255.255.0	
router ospf 1 serial R1	network 192.168.1.0 0.0.0.255 area 0 network 192.168.101.0 0.0.0.255 area 0		
router ospf 1 serial R2	network 192.168.1.0 0.0.0.255 area 0 network 192.168.100.0 0.0.0.255 area 0		

R1:

--- System Configuration Dialog ---

Continue with configuration dialog? [yes/no]: **no**
Press RETURN to get started!

Router>
Router>enable
Router#configure terminal

Enter configuration commands, one per line. End with CNTL/Z.

Router(config)#hostname R1
R1(config)#interface serial 0/1/0
R1(config-if)#ip address 192.168.1.1 255.255.255.0
R1(config-if)#clock rate 64000
R1(config-if)#no shutdown
R1(config-if)#router ospf 1
R1(config-router)#network 192.168.1.0 0.0.0.255 area 0
R1(config-router)#network 192.168.101.0 0.0.0.255 area 0

%LINK-5-CHANGED: Interface Serial0/1/0, changed state to down

R1(config-if)#exit
R1(config)#exit

%SYS-5-CONFIG_I: Configured from console by console

R1#
R1#exit

R1 con0 is now available
Press RETURN to get started.

R1#enable
R1#configure terminal

Enter configuration commands, one per line. End with CNTL/Z.

R1(config)#interface fastethernet 0/0
R1(config-if)#ip address 192.168.101.1 255.255.255.0
R1(config-if)#no shutdown

%LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to up

R1(config-if)#exit
R1(config)#exit

%SYS-5-CONFIG_I: Configured from console by console

R1#exit

R1 con0 is now available
Press RETURN to get started.

R2:

--- System Configuration Dialog ---

Continue with configuration dialog? [yes/no]: **no**
Press RETURN to get started!

Router>
Router>enable
Router#configure terminal

Enter configuration commands, one per line. End with CNTL/Z.

Router(config)#hostname R2
R2(config)#interface serial 0/1/0
R2(config-if)#ip address 192.168.1.2 255.255.255.0
R2(config-if)#no shutdown
R2(config-if)#router ospf 1
R2(config-router)#network 192.168.1.0 0.0.0.255 area 0
R2(config-router)#network 192.168.100.0 0.0.0.255 area 0

%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

00:03:32: %OSPF-5-ADJCHG: Process 1, Nbr 192.168.101.1 on Serial0/1/0 from LOADING to FULL, Loading Done

R2(config-if)#exit
R2(config)#exit

%SYS-5-CONFIG_I: Configured from console by console

R2#exit

R2 con0 is now available
Press RETURN to get started.

R2>enable
R2#configure terminal

Enter configuration commands, one per line. End with CNTL/Z.

R2(config)#interface fastethernet 0/0
R2(config-if)#ip address 192.168.100.1 255.255.255.0
R2(config-if)#no shutdown

%LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state
to up

R2(config-if)#exit
R2(config)#exit

%SYS-5-CONFIG_I: Configured from console by console

R2#exit

R2 con0 is now available
Press RETURN to get started.

PC1: Command Line

PC>ipconfig 192.168.101.2 255.255.255.0 192.168.101.1
PC>ipconfig

IP Address.......................: 192.168.101.2
Subnet Mask.....................: 255.255.255.0
Default Gateway.................: 192.168.101.1

PC2: Command Line

PC>ipconfig 192.168.100.2 255.255.255.0 192.168.100.1

PC>ipconfig

IP Address.......................: 192.168.100.2
Subnet Mask.....................: 255.255.255.0
Default Gateway.................: 192.168.100.1

Verificare:

PC2:

PC2>ping 192.168.100.1

Pinging 192.168.100.1 with 32 bytes of data:

Reply from 192.168.100.1: bytes=32 time=32ms TTL=255
Reply from 192.168.100.1: bytes=32 time=31ms TTL=255
Reply from 192.168.100.1: bytes=32 time=31ms TTL=255
Reply from 192.168.100.1: bytes=32 time=32ms TTL=255

Ping statistics for 192.168.100.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 31ms, Maximum = 32ms, Average = 31ms

PC2>ping 192.168.1.2

Pinging 192.168.1.2 with 32 bytes of data:

Reply from 192.168.1.2: bytes=32 time=31ms TTL=255
Reply from 192.168.1.2: bytes=32 time=31ms TTL=255
Reply from 192.168.1.2: bytes=32 time=31ms TTL=255
Reply from 192.168.1.2: bytes=32 time=31ms TTL=255

Ping statistics for 192.168.1.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 31ms, Maximum = 31ms, Average = 31ms

PC2>ping 192.168.1.1

Pinging 192.168.1.1 with 32 bytes of data:

Reply from 192.168.1.1: bytes=32 time=48ms TTL=254

Reply from 192.168.1.1: bytes=32 time=63ms TTL=254
Reply from 192.168.1.1: bytes=32 time=63ms TTL=254
Reply from 192.168.1.1: bytes=32 time=62ms TTL=254

Ping statistics for 192.168.1.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 48ms, Maximum = 63ms, Average = 59ms

PC2>ping 192.168.101.1

Pinging 192.168.101.1 with 32 bytes of data:

Reply from 192.168.101.1: bytes=32 time=63ms TTL=254
Reply from 192.168.101.1: bytes=32 time=63ms TTL=254
Reply from 192.168.101.1: bytes=32 time=62ms TTL=254
Reply from 192.168.101.1: bytes=32 time=62ms TTL=254

Ping statistics for 192.168.101.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 62ms, Maximum = 63ms, Average = 62ms

PC2>ping 192.168.101.2

Pinging 192.168.101.2 with 32 bytes of data:

Reply from 192.168.101.2: bytes=32 time=110ms TTL=126
Reply from 192.168.101.2: bytes=32 time=94ms TTL=126
Reply from 192.168.101.2: bytes=32 time=94ms TTL=126
Reply from 192.168.101.2: bytes=32 time=78ms TTL=126

Ping statistics for 192.168.101.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 78ms, Maximum = 110ms, Average = 94ms

R2:

R2>ping 192.168.100.2

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.100.2, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 19/28/31 ms

R2>ping 192.168.1.2

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.1.2, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 62/65/78 ms

R2>ping 192.168.1.1

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.1.1, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 31/31/32 ms

R2>ping 192.168.101.1

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.101.1, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 31/31/32 ms

R2>ping 192.168.101.2

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.101.2, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 47/60/78 ms

PC1:

PC1>ping 192.168.101.1

Pinging 192.168.101.1 with 32 bytes of data:

Reply from 192.168.101.1: bytes=32 time=31ms TTL=255
Reply from 192.168.101.1: bytes=32 time=31ms TTL=255
Reply from 192.168.101.1: bytes=32 time=31ms TTL=255
Reply from 192.168.101.1: bytes=32 time=31ms TTL=255

Ping statistics for 192.168.101.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 31ms, Maximum = 31ms, Average = 31ms

PC1>ping 192.168.1.1

Pinging 192.168.1.1 with 32 bytes of data:

Reply from 192.168.1.1: bytes=32 time=31ms TTL=255
Reply from 192.168.1.1: bytes=32 time=31ms TTL=255
Reply from 192.168.1.1: bytes=32 time=46ms TTL=255
Reply from 192.168.1.1: bytes=32 time=31ms TTL=255

Ping statistics for 192.168.1.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 31ms, Maximum = 46ms, Average = 34ms

PC1>ping 192.168.1.2

Pinging 192.168.1.2 with 32 bytes of data:

Reply from 192.168.1.2: bytes=32 time=62ms TTL=254
Reply from 192.168.1.2: bytes=32 time=63ms TTL=254
Reply from 192.168.1.2: bytes=32 time=63ms TTL=254
Reply from 192.168.1.2: bytes=32 time=63ms TTL=254

Ping statistics for 192.168.1.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 62ms, Maximum = 63ms, Average = 62ms

PC1>ping 192.168.100.1

Pinging 192.168.100.1 with 32 bytes of data:

Reply from 192.168.100.1: bytes=32 time=62ms TTL=254
Reply from 192.168.100.1: bytes=32 time=78ms TTL=254
Reply from 192.168.100.1: bytes=32 time=62ms TTL=254
Reply from 192.168.100.1: bytes=32 time=63ms TTL=254

Ping statistics for 192.168.100.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 62ms, Maximum = 78ms, Average = 66ms

PC1>ping 192.168.100.2

Pinging 192.168.100.2 with 32 bytes of data:

Reply from 192.168.100.2: bytes=32 time=94ms TTL=126
Reply from 192.168.100.2: bytes=32 time=109ms TTL=126
Reply from 192.168.100.2: bytes=32 time=80ms TTL=126
Reply from 192.168.100.2: bytes=32 time=94ms TTL=126

Ping statistics for 192.168.100.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 80ms, Maximum = 109ms, Average = 94ms

R1:

R1>ping 192.168.101.2

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.101.2, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 31/34/47 ms

R1>ping 192.168.1.1

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.1.1, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 62/62/63 ms

R1>ping 192.168.1.2

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.1.2, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 31/31/32 ms

R1>ping 192.168.100.1

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.100.1, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 31/31/32 ms

R1>ping 192.168.100.2

Type escape sequence to abort.
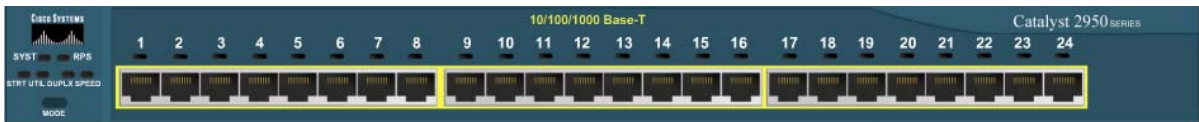Sending 5, 100-byte ICMP Echos to 192.168.100.2, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 62/62/63 ms

Laborator 10 – Switch 2950→ Adresare IP
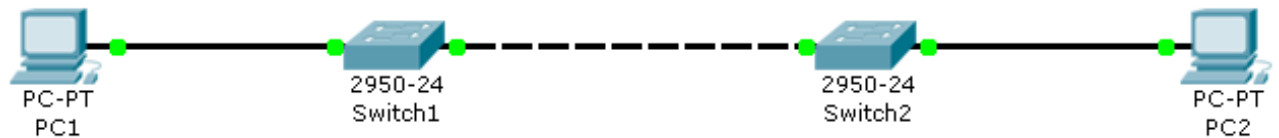
Să se configureze urmatoarea reţea urmărind tabelul anexat.

PC1	IP: 192.168.100.1	Subnet Mask: 255.255.255.0
PC2	IP: 192.168.100.2	Subnet Mask: 255.255.255.0
Interfaţa vlan 1 SW1	IP: 192.168.100.101	Subnet Mask: 255.255.255.0
Interfaţa vlan 1 SW2	IP: 192.168.100.102	Subnet Mask: 255.255.255.0

SW1:

Switch>
Switch>enable
Switch#configure terminal

Enter configuration commands, one per line. End with CNTL/Z.

switch1(config)#hostname SW1
SW1(config)#interface FastEthernet0/1
SW1(config-if)#no shutdown
SW1(config-if)#exit
SW1(config)#interface vlan 1
SW1(config-if)#ip address 192.168.100.101 255.255.255.0
SW1(config-if)#exit

SW1(config)#exit

%SYS-5-CONFIG_I: Configured from console by console

SW1#exit

SW1 con0 is now available

Press RETURN to get started.

SW2:

Switch>
Switch>enable
Switch#configure terminal

Enter configuration commands, one per line. End with CNTL/Z.

Switch2(config)#hostname SW2
SW2(config)#interface FastEthernet0/1
SW2(config-if)#no shutdown
SW2(config-if)#exit
SW2(config)#interface vlan 1
SW2(config-if)#ip address 192.168.100.102 255.255.255.0
SW2(config-if)#exit
SW2(config)#exit

%SYS-5-CONFIG_I: Configured from console by console

SW2#exit

SW2 con0 is now available

Press RETURN to get started.

PC1: Command Line

PC>ipconfig 192.168.100.1 255.255.255.0
PC>ipconfig

IP Address.......................: 192.168.100.1
Subnet Mask.....................: 255.255.255.0

PC2: Command Line

PC>ipconfig 192.168.100.2 255.255.255.0
PC>ipconfig

IP Address.......................: 192.168.100.2
Subnet Mask.....................: 255.255.255.0

Verificare:

PC2:

PC2>ping 192.168.100.1

Pinging 192.168.100.1 with 32 bytes of data:

Reply from 192.168.100.1: bytes=32 time=94ms TTL=128
Reply from 192.168.100.1: bytes=32 time=94ms TTL=128
Reply from 192.168.100.1: bytes=32 time=94ms TTL=128
Reply from 192.168.100.1: bytes=32 time=93ms TTL=128
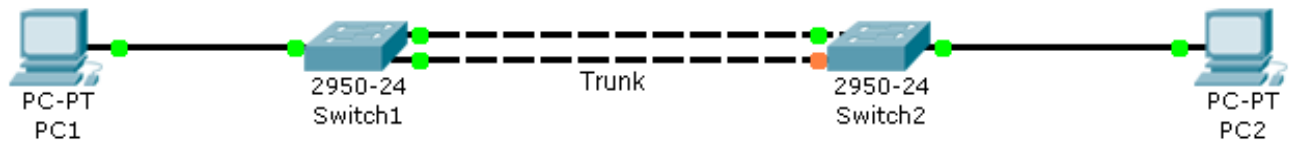
Ping statistics for 192.168.100.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 93ms, Maximum = 94ms, Average = 93ms

PC1:

PC1>ping 192.168.100.2

Pinging 192.168.100.2 with 32 bytes of data:

Reply from 192.168.100.2: bytes=32 time=94ms TTL=128
Reply from 192.168.100.2: bytes=32 time=94ms TTL=128
Reply from 192.168.100.2: bytes=32 time=80ms TTL=128
Reply from 192.168.100.2: bytes=32 time=94ms TTL=128

Ping statistics for 192.168.100.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
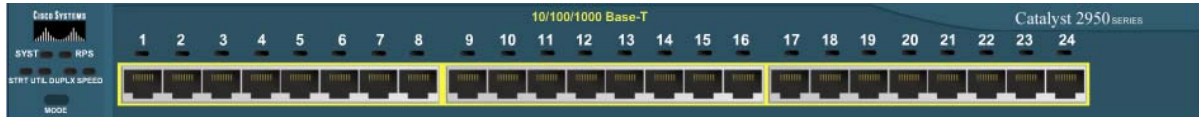Approximate round trip times in milli-seconds:
    Minimum = 80ms, Maximum = 94ms, Average = 90ms

Laborator 11 - Switch 2950→ Trunk

Să se configureze urmatoarea reţea urmărind tabelul anexat.

PC1	IP: 192.168.100.1	Subnet Mask: 255.255.255.0
PC2	IP: 192.168.100.2	Subnet Mask: 255.255.255.0
Interfaţa 0/1 SW1	switchport mode trunk	
Interfaţa 0/2 SW1	switchport mode trunk	
Interfaţa 0/1 SW2	switchport mode trunk	
Interfaţa 0/2 SW2	switchport mode trunk	

SW1:

Switch>
Switch>enable
Switch#configure terminal

Enter configuration commands, one per line. End with CNTL/Z.

switch1(config)#hostname SW1
SW1(config)#interface FastEthernet0/1
SW1(config-if)#switchport mode trunk
SW1(config-if)#no shutdown
SW1(config)#interface FastEthernet0/2
SW1(config-if)#switchport mode trunk
SW1(config-if)#no shutdown
SW1(config)#interface FastEthernet0/3
SW1(config-if)#no shutdown
SW1(config-if)#exit

SW1(config)#exit

%SYS-5-CONFIG_I: Configured from console by console

SW1#exit

SW1 con0 is now available

Press RETURN to get started.

SW2:

Switch>
Switch>enable
Switch#configure terminal

Enter configuration commands, one per line. End with CNTL/Z.

Switch2(config)#hostname SW2
SW2(config)#interface FastEthernet0/1
SW2(config-if)#switchport mode trunk
SW2(config-if)#no shutdown
SW2(config)#interface FastEthernet0/2
SW2(config-if)#switchport mode trunk
SW2(config-if)#no shutdown
SW2(config)#interface FastEthernet0/3
SW2(config-if)#no shutdown
SW2(config-if)#exit
SW2(config)#exit

%SYS-5-CONFIG_I: Configured from console by console

SW2#exit

SW2 con0 is now available

Press RETURN to get started.

PC1: Command Line

PC>ipconfig 192.168.100.1 255.255.255.0
PC>ipconfig

IP Address......................: 192.168.100.1
Subnet Mask.....................: 255.255.255.0

PC2: Command Line

PC>ipconfig 192.168.100.2 255.255.255.0
PC>ipconfig

IP Address......................: 192.168.100.2
Subnet Mask....................: 255.255.255.0

Verificare:

PC2:

PC2>ping 192.168.100.1

Pinging 192.168.100.1 with 32 bytes of data:

Reply from 192.168.100.1: bytes=32 time=94ms TTL=128
Reply from 192.168.100.1: bytes=32 time=94ms TTL=128
Reply from 192.168.100.1: bytes=32 time=94ms TTL=128
Reply from 192.168.100.1: bytes=32 time=93ms TTL=128

Ping statistics for 192.168.100.1:
   Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 93ms, Maximum = 94ms, Average = 93ms

PC1:

PC1>ping 192.168.100.2

Pinging 192.168.100.2 with 32 bytes of data:

Reply from 192.168.100.2: bytes=32 time=94ms TTL=128
Reply from 192.168.100.2: bytes=32 time=94ms TTL=128
Reply from 192.168.100.2: bytes=32 time=80ms TTL=128
Reply from 192.168.100.2: bytes=32 time=94ms TTL=128

Ping statistics for 192.168.100.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
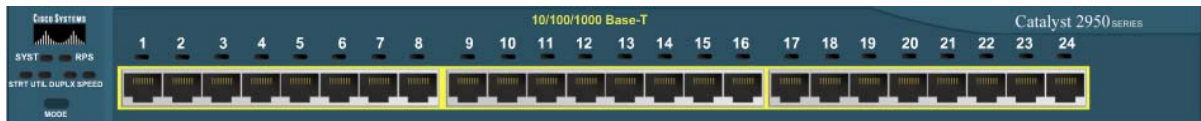Approximate round trip times in milli-seconds:
    Minimum = 80ms, Maximum = 94ms, Average = 90ms

Laborator 12 - Switch 2950→ Trunk (Dinamic)

În modul dinamic cele două switch-uri transmit frame-uri DTP
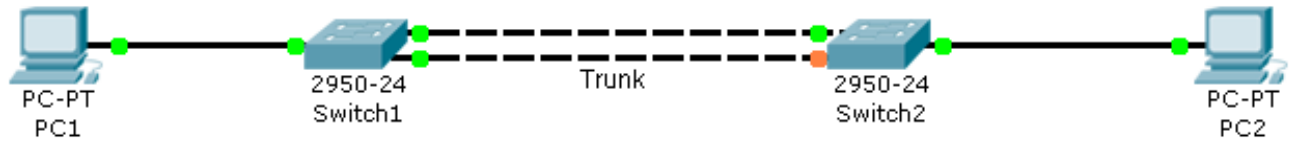
Să se configureze urmatoarea reţea urmărind tabelul anexat.

PC1	IP: 192.168.100.1	Subnet Mask: 255.255.255.0
PC2	IP: 192.168.100.2	Subnet Mask: 255.255.255.0
Interfaţa 0/1 SW1	switchport mode dynamic desirable	
Interfaţa 0/2 SW1	switchport mode dynamic desirable	
Interfaţa 0/1 SW2	switchport mode dynamic desirable	
Interfaţa 0/2 SW2	switchport mode dynamic desirable	

SW1:

Switch>
Switch>enable
Switch#configure terminal

Enter configuration commands, one per line. End with CNTL/Z.

switch1(config)#hostname SW1
SW1(config)#interface FastEthernet0/1
SW1(config-if)# switchport mode dynamic desirable
SW1(config-if)#no shutdown
SW1(config)#interface FastEthernet0/2
SW1(config-if)# switchport mode dynamic desirable
SW1(config-if)#no shutdown

SW1(config)#interface FastEthernet0/3
SW1(config-if)#no shutdown
SW1(config-if)#exit
SW1(config)#exit

%SYS-5-CONFIG_I: Configured from console by console

SW1#exit

SW1 con0 is now available

Press RETURN to get started.

SW2:

Switch>
Switch>enable
Switch#configure terminal

Enter configuration commands, one per line. End with CNTL/Z.

Switch2(config)#hostname SW2
SW2(config)#interface FastEthernet0/1
SW2(config-if)# switchport mode dynamic desirable
SW2(config-if)#no shutdown
SW2(config)#interface FastEthernet0/2
SW2(config-if)# switchport mode dynamic desirable
SW2(config-if)#no shutdown
SW2(config)#interface FastEthernet0/3
SW2(config-if)#no shutdown
SW2(config-if)#exit
SW2(config)#exit

%SYS-5-CONFIG_I: Configured from console by console

SW2#exit

SW2 con0 is now available

Press RETURN to get started.

PC1: Command Line

PC>ipconfig 192.168.100.1 255.255.255.0
PC>ipconfig

IP Address.......................: 192.168.100.1
Subnet Mask.....................: 255.255.255.0

PC2: Command Line

PC>ipconfig 192.168.100.2 255.255.255.0
PC>ipconfig

IP Address.......................: 192.168.100.2
Subnet Mask.....................: 255.255.255.0

Verificare:

PC2:

PC2>ping 192.168.100.1

Pinging 192.168.100.1 with 32 bytes of data:

Reply from 192.168.100.1: bytes=32 time=94ms TTL=128
Reply from 192.168.100.1: bytes=32 time=94ms TTL=128
Reply from 192.168.100.1: bytes=32 time=94ms TTL=128
Reply from 192.168.100.1: bytes=32 time=93ms TTL=128

Ping statistics for 192.168.100.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 93ms, Maximum = 94ms, Average = 93ms

PC1:

PC1>ping 192.168.100.2

Pinging 192.168.100.2 with 32 bytes of data:

Reply from 192.168.100.2: bytes=32 time=94ms TTL=128
Reply from 192.168.100.2: bytes=32 time=94ms TTL=128
Reply from 192.168.100.2: bytes=32 time=80ms TTL=128
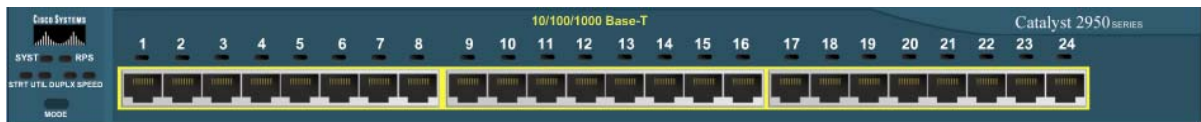Reply from 192.168.100.2: bytes=32 time=94ms TTL=128

Ping statistics for 192.168.100.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 80ms, Maximum = 94ms, Average = 90ms

Laborator 13 - Switch 2950 → VLAN-uri
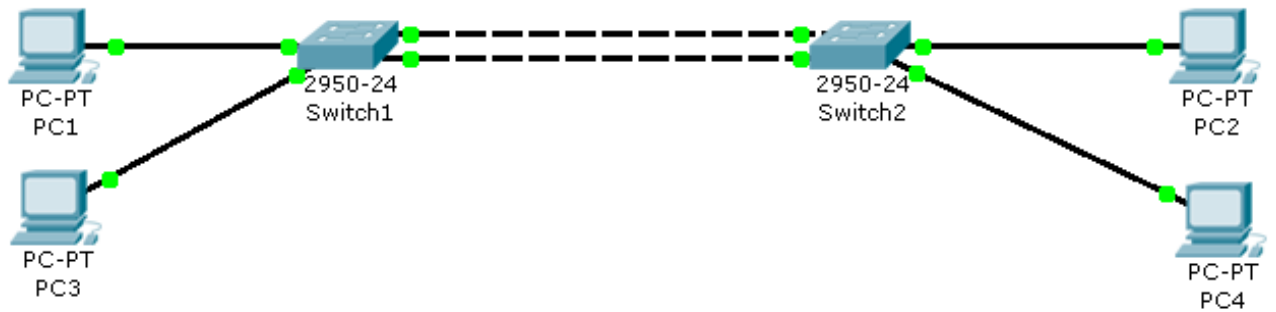
Să se configureze urmatoarea reţea urmărind tabelul anexat.

PC1	IP: 192.168.100.1	Subnet Mask: 255.255.255.0
PC2	IP: 192.168.100.2	Subnet Mask: 255.255.255.0
SW1 VLAN	VLAN 10 VLAN 100	
SW2 VLAN	VLAN 10 VLAN 100	
Interfaţa 0/1 SW1	Switchport access vlan 10	
Interfaţa 0/2 SW1	Switchport access vlan 100	
Interfaţa 0/3 SW1	Switchport access vlan 10	
Interfaţa 0/4 SW1	Switchport access vlan 100	
Interfaţa 0/1 SW2	Switchport access vlan 10	
Interfaţa 0/2 SW2	Switchport access vlan 100	
Interfaţa 0/3 SW2	Switchport access vlan 10	
Interfaţa 0/4 SW2	Switchport access vlan 100	

SW1:

Switch>
Switch>enable
Switch#configure terminal

Enter configuration commands, one per line. End with CNTL/Z.

switch1(config)#hostname SW1
SW1(config)#vlan 10
SW1(config-vlan)#vlan 100
SW1(config)#interface FastEthernet0/1
SW1(config-if)# Switchport access vlan 10
SW1(config-if)#no shutdown
SW1(config)#interface FastEthernet0/2
SW1(config-if)# Switchport access vlan 100
SW1(config-if)#no shutdown
SW1(config)#interface FastEthernet0/3
SW1(config-if)# Switchport access vlan 10
SW1(config-if)#no shutdown
SW1(config)#interface FastEthernet0/4
SW1(config-if)# Switchport access vlan 100
SW1(config-if)#no shutdown

SW1(config-if)#exit
SW1(config)#exit

%SYS-5-CONFIG_I: Configured from console by console

SW1#exit

SW1 con0 is now available

Press RETURN to get started.

SW2:

Switch>
Switch>enable
Switch#configure terminal

Enter configuration commands, one per line. End with CNTL/Z.

Switch2(config)#hostname SW2

SW2(config)#vlan 10
SW2(config-vlan)#vlan 100
SW2(config)#interface FastEthernet0/1
SW2(config-if)# Switchport access vlan 10
SW2(config-if)#no shutdown
SW2(config)#interface FastEthernet0/2
SW2(config-if)# Switchport access vlan 100
SW2(config-if)#no shutdown
SW2(config)#interface FastEthernet0/3
SW2(config-if)# Switchport access vlan 10
SW2(config-if)#no shutdown
SW2(config)#interface FastEthernet0/4
SW2(config-if)# Switchport access vlan 100
SW2(config-if)#no shutdown

%SYS-5-CONFIG_I: Configured from console by console

SW2#exit

SW2 con0 is now available

Press RETURN to get started.

PC1: Command Line

PC>ipconfig 192.168.100.1 255.255.255.0
PC>ipconfig

IP Address.......................: 192.168.100.1
Subnet Mask.....................: 255.255.255.0

PC2: Command Line

PC>ipconfig 192.168.100.2 255.255.255.0
PC>ipconfig

IP Address.......................: 192.168.100.2
Subnet Mask.....................: 255.255.255.0

PC3: Command Line

PC>ipconfig 192.168.101.1 255.255.255.0
PC>ipconfig

IP Address.......................: 192.168.101.1
Subnet Mask.....................: 255.255.255.0

PC2: Command Line

PC>ipconfig 192.168.101.2 255.255.255.0
PC>ipconfig

IP Address.......................: 192.168.101.2
Subnet Mask.....................: 255.255.255.0

Verificare:

PC2:

PC2>ping 192.168.100.1

Pinging 192.168.100.1 with 32 bytes of data:

Reply from 192.168.100.1: bytes=32 time=94ms TTL=128
Reply from 192.168.100.1: bytes=32 time=94ms TTL=128
Reply from 192.168.100.1: bytes=32 time=94ms TTL=128
Reply from 192.168.100.1: bytes=32 time=93ms TTL=128

Ping statistics for 192.168.100.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 93ms, Maximum = 94ms, Average = 93ms

PC2>ping 192.168.101.1

Pinging 192.168.101.1 with 32 bytes of data:

Request timed out.
Request timed out.
Request timed out.
Request timed out.

Ping statistics for 192.168.101.1:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

PC2>ping 192.168.101.2

Pinging 192.168.101.2 with 32 bytes of data:

Request timed out.

Request timed out.
Request timed out.
Request timed out.

Ping statistics for 192.168.101.2:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

PC1:

PC1>ping 192.168.100.2

Pinging 192.168.100.2 with 32 bytes of data:

Reply from 192.168.100.2: bytes=32 time=94ms TTL=128
Reply from 192.168.100.2: bytes=32 time=94ms TTL=128
Reply from 192.168.100.2: bytes=32 time=80ms TTL=128
Reply from 192.168.100.2: bytes=32 time=94ms TTL=128

Ping statistics for 192.168.100.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 80ms, Maximum = 94ms, Average = 90ms

PC1>ping 192.168.101.1

Pinging 192.168.101.1 with 32 bytes of data:

Request timed out.
Request timed out.
Request timed out.
Request timed out.

Ping statistics for 192.168.101.1:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

PC1>ping 192.168.101.2

Pinging 192.168.101.2 with 32 bytes of data:

Request timed out.
Request timed out.
Request timed out.
Request timed out.

Ping statistics for 192.168.101.2:

Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

PC4:

PC4>ping 192.168.101.1

Pinging 192.168.101.1 with 32 bytes of data:

Reply from 192.168.101.1: bytes=32 time=94ms TTL=128
Reply from 192.168.101.1: bytes=32 time=67ms TTL=128
Reply from 192.168.101.1: bytes=32 time=93ms TTL=128
Reply from 192.168.101.1: bytes=32 time=94ms TTL=128

Ping statistics for 192.168.101.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 67ms, Maximum = 94ms, Average = 87ms

PC4>ping 192.168.100.1

Pinging 192.168.100.1 with 32 bytes of data:

Request timed out.
Request timed out.
Request timed out.
Request timed out.

Ping statistics for 192.168.100.1:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

PC>ping 192.168.100.2

Pinging 192.168.100.2 with 32 bytes of data:

Request timed out.
Request timed out.
Request timed out.
Request timed out.

Ping statistics for 192.168.100.2:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

PC3:

PC3>ping 192.168.101.2

Pinging 192.168.101.2 with 32 bytes of data:

Reply from 192.168.101.2: bytes=32 time=94ms TTL=128
Reply from 192.168.101.2: bytes=32 time=94ms TTL=128
Reply from 192.168.101.2: bytes=32 time=78ms TTL=128
Reply from 192.168.101.2: bytes=32 time=110ms TTL=128

Ping statistics for 192.168.101.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 78ms, Maximum = 110ms, Average = 94ms

PC3>ping 192.168.100.1

Pinging 192.168.100.1 with 32 bytes of data:

Request timed out.
Request timed out.
Request timed out.
Request timed out.

Ping statistics for 192.168.100.1:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

PC3>ping 192.168.100.2

Pinging 192.168.100.2 with 32 bytes of data:
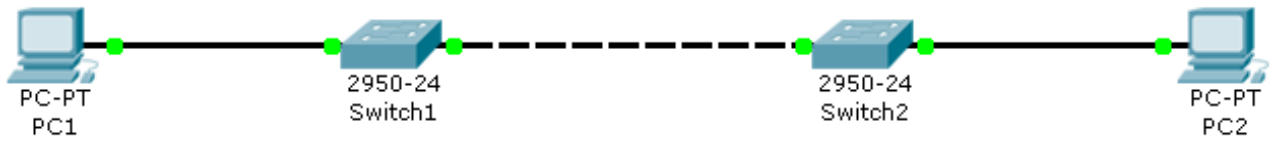
Request timed out.
Request timed out.
Request timed out.
Request timed out.

Ping statistics for 192.168.100.2:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

Laborator 14 - Switch 2950→ Stergere VLAN-uri

SW1:

Switch>
Switch>enable
Switch#configure terminal

Enter configuration commands, one per line. End with CNTL/Z.

switch1(config)#hostname SW1
SW1(config)#no vlan 10
SW1(config)#exit

%SYS-5-CONFIG_I: Configured from console by console

SW1#exit

SW1 con0 is now available

Press RETURN to get started.

SW2:

Switch>
Switch>enable
Switch#configure terminal

Enter configuration commands, one per line. End with CNTL/Z.

Switch2(config)#hostname SW2
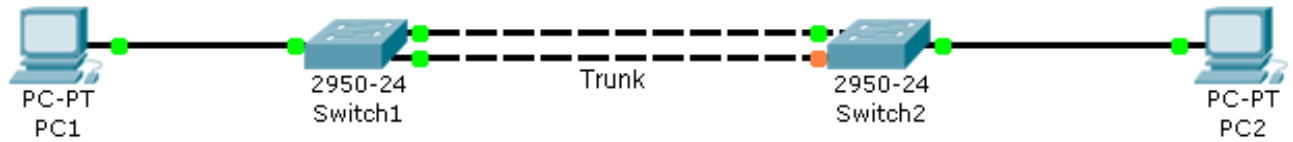**SW2(config)#no vlan 10**
SW2(config)#exit

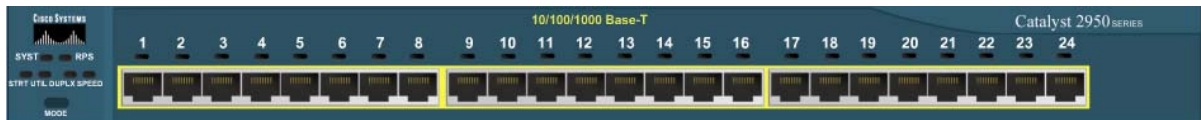%SYS-5-CONFIG_I: Configured from console by console

SW2#exit

SW2 con0 is now available
Press RETURN to get started.

Laborator 15- Switch 2950→ VTP

Să se configureze urmatoarea reţea urmărind tabelul anexat.

PC1	IP: 192.168.100.1	Subnet Mask: 255.255.255.0
PC2	IP: 192.168.100.2	Subnet Mask: 255.255.255.0
Interfaţa 0/1 SW1	switchport mode trunk	
Interfaţa 0/2 SW1	switchport mode trunk	
Interfaţa 0/2 SW1	vtp server vtp domain cisco	
Interfaţa 0/1 SW2	switchport mode trunk	
Interfaţa 0/2 SW2	switchport mode trunk	
Interfaţa 0/2 SW2	vtp server vtp domain cisco	

SW1:

Switch>
Switch>enable
Switch#configure terminal

Enter configuration commands, one per line. End with CNTL/Z.

switch1(config)#hostname SW1
SW1(config)#interface FastEthernet0/1
SW1(config-if)#switchport mode trunk
SW1(config-if)#no shutdown

SW1(config)#interface FastEthernet0/2
SW1(config-if)#switchport mode trunk
SW1(config-if)#)#vtp mode server

Device mode already VTP SERVER.

SW1(config)#vtp domain cisco

Changing VTP domain name from NULL to cisco

SW1(config-if)#no shutdown
SW1(config)#interface FastEthernet0/3
SW1(config-if)#no shutdown
SW1(config-if)#exit
SW1(config)#exit

%SYS-5-CONFIG_I: Configured from console by console

SW1#exit

SW1 con0 is now available

Press RETURN to get started.

SW2:

Switch>
Switch>enable
Switch#configure terminal

Enter configuration commands, one per line. End with CNTL/Z.

Switch2(config)#hostname SW2
SW2(config)#interface FastEthernet0/1
SW2(config-if)#switchport mode trunk
SW2(config-if)#no shutdown
SW2(config)#interface FastEthernet0/2
SW2(config-if)#switchport mode trunk
SW2(config-if)#)#vtp mode server

Device mode already VTP SERVER.

SW2(config)#vtp domain cisco

Domain name already set to cisco.

SW2(config-if)#no shutdown
SW2(config)#interface FastEthernet0/3
SW2(config-if)#no shutdown
SW2(config-if)#exit
SW2(config)#exit

%SYS-5-CONFIG_I: Configured from console by console

SW2#exit

SW2 con0 is now available

Press RETURN to get started.

PC1: Command Line

PC>ipconfig 192.168.100.1 255.255.255.0
PC>ipconfig

IP Address.......................: 192.168.100.1
Subnet Mask.....................: 255.255.255.0
PC2: Command Line

PC>ipconfig 192.168.100.2 255.255.255.0
PC>ipconfig

IP Address.......................: 192.168.100.2
Subnet Mask.....................: 255.255.255.0

Verificare:

PC2:

PC2>ping 192.168.100.1

Pinging 192.168.100.1 with 32 bytes of data:

Reply from 192.168.100.1: bytes=32 time=94ms TTL=128
Reply from 192.168.100.1: bytes=32 time=94ms TTL=128
Reply from 192.168.100.1: bytes=32 time=94ms TTL=128
Reply from 192.168.100.1: bytes=32 time=93ms TTL=128

Ping statistics for 192.168.100.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:

Minimum = 93ms, Maximum = 94ms, Average = 93ms

PC1:

PC1>ping 192.168.100.2

Pinging 192.168.100.2 with 32 bytes of data:

Reply from 192.168.100.2: bytes=32 time=94ms TTL=128
Reply from 192.168.100.2: bytes=32 time=94ms TTL=128
Reply from 192.168.100.2: bytes=32 time=80ms TTL=128
Reply from 192.168.100.2: bytes=32 time=94ms TTL=128

Ping statistics for 192.168.100.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 80ms, Maximum = 94ms, Average = 90ms