

Lab 7 - GNS3

File Edit View Control Node Annotate Tools Help

Node

- PC1
- PC2
- R1
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- R5
- Switch1
- Switch2

Serv...

- DESIGNER

1 warning

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R1 R2 R3 R4 R5 PC1 PC2

```

Welcome to Virtual PC Simulator, version 0.6.2
Built time: Apr 10 2019 02:42:20
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GNS3 is free software, distributed under the terms of the "BSD" licence.
Source code and license can be found at vpc.sf.net.
For more information, please visit wiki.freecode.com.cn.

Press '?' to get help.

executing the startup file

PC2> ip 10.1.3.2/24 10.1.3.1
Checking for duplicate address...
PC2: 10.1.3.2 255.255.255.0 gateway 10.1.3.1

PC2> ping 10.0.3.2/24
64 bytes from 10.0.3.2 icmp_seq=1 ttl=61 time=91.813 ms
64 bytes from 10.0.3.2 icmp_seq=2 ttl=61 time=100.829 ms
64 bytes from 10.0.3.2 icmp_seq=3 ttl=61 time=105.725 ms
64 bytes from 10.0.3.2 icmp_seq=4 ttl=61 time=105.358 ms
64 bytes from 10.0.3.2 icmp_seq=5 ttl=61 time=105.668 ms

PC2>

```

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2:47 PM 3/19/2024

R1

R2

R3

R4

R5

PC1

PC2

Welcome to Virtual PC Simulator, version 0.6.2
Dedicated to debugging.
Build time: Apr 10 2019 02:42:20
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VPCS is free software, distributed under the terms of the "BSD" licence.
Source code and license can be found at vpcs.sf.net.
For more information, please visit wiki.freecode.com.cn.
Press '?' to get help.

Executing the startup file

PC1> ip 10.0.3.2/24 10.0.3.1
Checking for duplicate address...
PC1 : 10.0.3.2 255.255.255.0 gateway 10.0.3.1

PC1> save
Saving startup configuration to startup.vpc
- done

PC1> ping 10.1.1.2/24
10.1.1.2 icmp_seq=1 timeout
64 bytes from 10.1.1.2 icmp_seq=2 ttl=61 time=109.664 ms
64 bytes from 10.1.1.2 icmp_seq=3 ttl=61 time=90.895 ms
64 bytes from 10.1.1.2 icmp_seq=4 ttl=61 time=90.715 ms
64 bytes from 10.1.1.2 icmp_seq=5 ttl=61 time=91.736 ms

PC1> []

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R1

R2

R3

R4

R5

PC1

PC2

R5(config-if)#R5(config-if)#ip address 10.2.1.2 2 255.255.255.0
% Invalid input detected at '^' marker.
R5(config-if)#R5(config-if)#ip address 10.2.1.2 2 255.255.255.0
% Invalid input detected at '^' marker.
R5(config-if)#ip address 10.2.1.2 255.255.255.0
R5(config-if)#no shutdown
R5(config-if)#exit
R5(config)#
*Mar 1 00:19:02.499: %LINK-3-UPDOWN: Interface FastEthernet0/1, changed state to up
*Mar 1 00:19:03.499: %LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to up
R5(config)#exit
R5#
*Mar 1 00:19:00.047: %SYS-5-CONF10_1: Configured from console by console
R5#
Building configuration...
[OK]
R5#config t
Enter configuration commands, one per line. End with CNTL/Z.
R5(config)#router rip
R5(config-router)#version 2
R5(config-router)#network 10.0.0.0
R5(config-router)#no auto-summary
R5(config-router)#exit
R5(config)#
% Ambiguous command: "ex"
R5(config)#exi
R5#
*Mar 1 00:29:38.391: %SYS-5-CONF10_1: Configured from console by console
R5#
Building configuration...
[OK]
R5#config t
Enter configuration commands, one per line. End with CNTL/Z.
R5(config)#show ip route
Codes: C - connected, S - static, R - RIP, M - mobile, B - BGP
O - OSPF, EX - OSPF external, O - OSPF, IA - OSPF inter area
N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
E1 - OSPF external type 1, E2 - OSPF external type 2
I - IS-IS, su - IS-IS summary, L1 - IS-IS level-1, L2 - IS-IS level-2
ia - IS-IS inter area, * - candidate default, U - per-user static route
o - ODR, P - periodic downloaded static route

Gateway of last resort is not set

10.0.0.0/24 is subnetted, 7 subnets
R 10.1.1.0 [120/2] via 10.1.1.1, 00:00:23, FastEthernet0
R 10.0.0.0 [120/2] via 10.2.1.1, 00:00:14, FastEthernet1
C 10.2.1.0 is directly connected, FastEthernet0/1
C 10.1.2.0 is directly connected, FastEthernet0/0
R 10.0.3.0 [120/2] via 10.2.1.1, 00:00:14, FastEthernet0/1
R 10.1.1.0 [120/2] via 10.1.1.1, 00:00:23, FastEthernet0
R 10.0.1.0 [120/2] via 10.2.1.1, 00:00:14, FastEthernet0/1
R 10.0.1.0 [120/2] via 10.1.2.1, 00:00:25, FastEthernet0

R5(config)#

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R1R2R3R4R5PC1PC2

```
R1(config-if)#(config-if)#ip address 10.2.1.2 2 255.255.255.0
% Invalid input detected at '^' marker.
R1(config-if)#(config-if)#ip address 10.2.1.2 2 255.255.255.0
% Invalid input detected at '^' marker.
R1(config-if)#ip address 10.2.1.2 255.255.255.0
R1(config-if)#no shutdown
R1(config-if)#exit
R1(config)#
*Mar 1 00:19:02.499: %LINK-3-UPDOWN: Interface FastEthernet0/1, changed state to up
*Mar 1 00:19:03.499: %LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to up
R1(config)#exit
R1#
*Mar 1 00:19:00.847: %SYS-5-CONFIG_I: Configured from console by console
R1#
Building configuration...
[OK]
R1#config t
Enter configuration commands, one per line. End with CNTL/Z.
R1(config)#router rip
R1(config-router)#version 2
R1(config-router)#network 10.0.0.0
R1(config-router)#no auto-summary
R1(config-router)#exit
R1(config)#ex
% ambiguous command: "ex"
R1(config)#exit
R1#
*Mar 1 00:20:18.391: %SYS-5-CONFIG_I: Configured from console by console
R1#
Building configuration...
[OK]
R1#config t
Enter configuration commands, one per line. End with CNTL/Z.
R1(config)#do show ip route
Codes: C - connected, S - static, R - RIP, M - mobile, B - BGP
        D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
        N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
        E1 - OSPF external type 1, E2 - OSPF external type 2
        I - IS-IS, su - IS-IS summary, L1 - IS-IS level-1, L2 - IS-IS level-2
        Ia - IS-IS inter area, * - candidate default, U - per-user static route
        o - ODR, P - periodic downloaded static route

Gateway of last resort is not set

R  10.0.0.0/24 is subnetted, 7 subnets
R    10.1.1.0 [120/1] via 10.1.2.1, 00:00:23, FastEthernet0/0
R    10.0.1.0 [120/1] via 10.2.1.1, 00:00:14, FastEthernet0/1
C    10.2.1.0 is directly connected, FastEthernet0/1
C    10.1.2.0 is directly connected, FastEthernet0/0
R    10.0.2.0 [120/1] via 10.2.1.1, 00:00:14, FastEthernet0/1
R    10.1.1.0 [120/1] via 10.1.2.1, 00:00:23, FastEthernet0/0
R    10.0.1.0 [120/1] via 10.2.1.1, 00:00:14, FastEthernet0/1
R    10.0.1.0 [120/1] via 10.1.2.1, 00:00:23, FastEthernet0/0
R1(config)#
```

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R1R2R3R4R5PC1PC2

```
R1(config)#int fa0/1
R1(config-if)#ip address 10.0.2.2 255.255.255.0
R1(config-if)#no shutdown
R1(config-if)#exit
R1(config)#
*Mar 1 00:15:23.971: %LINK-3-UPDOWN: Interface FastEthernet0/1, changed state to up
*Mar 1 00:15:24.971: %LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to up
R1(config)#exit
R1#
% Invalid input detected at '^' marker.
R1(config)#exit
R1#
Building configuration...
[OK]
*Mar 1 00:15:32.003: %SYS-5-CONFIG_I: Configured from console by console[OK]
R1#
Building configuration...
[OK]
R1#
Building configuration...
[OK]
R1#
Building configuration...
[OK]
R1#config t
Enter configuration commands, one per line. End with CNTL/Z.
R1(config)#router rip
R1(config-router)#version 2
R1(config-router)#network 10.0.0.0
R1(config-router)#no auto-summary
R1(config-router)#exit
R1(config)#exit
R1#
*Mar 1 00:20:01.755: %SYS-5-CONFIG_I: Configured from console by console
R1#
Building configuration...
[OK]
R1#
Building configuration...
[OK]
R1#config t
Enter configuration commands, one per line. End with CNTL/Z.
R1(config)#do show ip route
Codes: C - connected, S - static, R - RIP, M - mobile, B - BGP
        D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
        N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
        E1 - OSPF external type 1, E2 - OSPF external type 2
        I - IS-IS, su - IS-IS summary, L1 - IS-IS level-1, L2 - IS-IS level-2
        Ia - IS-IS inter area, * - candidate default, U - per-user static route
        o - ODR, P - periodic downloaded static route

Gateway of last resort is not set

R  10.0.0.0/24 is subnetted, 7 subnets
R    10.1.1.0 [120/2] via 10.2.1.2, 00:00:00, FastEthernet0/0
C    10.0.2.0 is directly connected, FastEthernet0/1
C    10.2.1.0 is directly connected, FastEthernet0/0
R    10.1.2.0 [120/1] via 10.2.1.2, 00:00:00, FastEthernet0/0
R    10.0.1.0 [120/1] via 10.0.2.1, 00:00:00, FastEthernet0/1
R    10.1.1.0 [120/2] via 10.2.1.2, 00:00:00, FastEthernet0/0
R    120/2] via 10.0.2.1, 00:00:00, FastEthernet0/1
R    10.0.1.0 [120/1] via 10.0.2.1, 00:00:00, FastEthernet0/1
R1(config)#
```

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R1R2R3R4R5PC1PC2

```
R2(config-if)#no shutdown
R2(config-if)#exit
R2(config)#
*Mar 1 00:11:14.291: N2DK-3-UPDOWN: Interface FastEthernet0/0, changed state to up
*Mar 1 00:11:15.291: N2INPMDT0-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to up
R2(config)#exit fa/1
R2(config-if)#ip address 10.1.1.2 255.255.255.0
R2(config-if)#no shutdown
R2(config-if)#exit
R2(config)#
*Mar 1 00:11:46.635: N2DK-3-UPDOWN: Interface FastEthernet0/1, changed state to up
*Mar 1 00:11:47.635: N2INPMDT0-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to up
R2(config)#exit
R2#
*Mar 1 00:14:01.935: N2YS-5-CONF10_I: Configured from console by console
R2#
Building configuration...
[OK]
R2#router rip
R2#
% Invalid input detected at '^' marker.

R2(config)#
Enter configuration commands, one per line. End with CNTL/Z.
R2(config)#router rip
R2(config-router)#version 2
R2(config-router)#network 10.0.0.0
R2(config-router)#auto-summary
R2(config-router)#exit
R2(config)#exit
R2#
*Mar 1 00:27:56.531: N2YS-5-CONF10_I: Configured from console by console
R2#
Building configuration...
[OK]
R2(config)#
Enter configuration commands, one per line. End with CNTL/Z.
R2(config)#show ip route
Codes: C - connected, S - static, R - RIP, H - mobile, B - BGP
        D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
        N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
        E1 - OSPF external type 1, E2 - OSPF external type 2
        I - IS-IS, su - IS-IS summary, L1 - IS-IS level-1, L2 - IS-IS level-2
        Ia - IS-IS inter area, * - candidate default, U - per-user static route
        o - ODR, P - periodic downloaded static route

Gateway of last resort is not set

10.0.0.0/24 is subnetted, 7 subnets
R    10.1.3.0 [120/1] via 10.1.1.1, 00:00:00, FastEthernet0/1
R    10.0.2.0 [120/1] via 10.0.1.1, 00:00:12, FastEthernet0/0
R    10.2.1.0 [120/2] via 10.1.1.1, 00:00:00, FastEthernet0/1
    [120/2] via 10.0.1.1, 00:00:12, FastEthernet0/0
R    10.1.2.0 [120/1] via 10.1.1.1, 00:00:00, FastEthernet0/1
R    10.0.3.0 [120/1] via 10.0.1.1, 00:00:12, FastEthernet0/0
C    10.1.1.0 is directly connected, FastEthernet0/1
C    10.0.1.0 is directly connected, FastEthernet0/0
R2(config)#
```

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R1R2R3R4R5PC1PC2

```
R1(config-if)#ip address 10.0.3.1 255.255.255.0
R1(config-if)#no shutdown
R1(config-if)#exit
R1(config)#
*Mar 1 00:09:31.793: N2DK-3-UPDOWN: Interface FastEthernet2/0, changed state to up
*Mar 1 00:09:32.793: N2INPMDT0-5-UPDOWN: Line protocol on Interface FastEthernet2/0, changed state to up
R1(config)#exit
R1#
*Mar 1 00:09:53.823: N2YS-5-CONF10_I: Configured from console by console
R1#
Translating "save"
Translating "save"
% Unknown command or computer name, or unable to find computer address
R1#
Building configuration...
[OK]
R1(config)#
Enter configuration commands, one per line. End with CNTL/Z.
R1(config)#router rip
R1(config-router)#version 2
R1(config-router)#network 10.0.0.0
R1(config-router)#auto-summary
R1(config-router)#exit
R1(config)#exit
R1#
*Mar 1 00:27:12.423: N2YS-5-CONF10_I: Configured from console by console
R1#
Building configuration...
[OK]
R1(config)#
Enter configuration commands, one per line. End with CNTL/Z.
R1(config)#sh ip route
Codes: C - connected, S - static, R - RIP, H - mobile, B - BGP
        D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
        N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
        E1 - OSPF external type 1, E2 - OSPF external type 2
        I - IS-IS, su - IS-IS summary, L1 - IS-IS level-1, L2 - IS-IS level-2
        Ia - IS-IS inter area, * - candidate default, U - per-user static route
        o - ODR, P - periodic downloaded static route

Gateway of last resort is not set

10.0.0.0/24 is subnetted, 7 subnets
R    10.1.3.0 [120/2] via 10.0.1.2, 00:00:03, FastEthernet0/0
C    10.0.2.0 is directly connected, FastEthernet0/1
R    10.2.1.0 [120/1] via 10.0.2.2, 00:00:19, FastEthernet0/1
R    10.1.2.0 [120/2] via 10.0.2.2, 00:00:19, FastEthernet0/1
C    10.0.3.0 is directly connected, FastEthernet2/0
R    10.1.1.0 [120/1] via 10.0.1.2, 00:00:00, FastEthernet0/0
C    10.0.1.0 is directly connected, FastEthernet0/0
R1(config)#
```

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