

Virtual Machine Settings



Hardware Options

Device	Summary
Memory	4.3 GB
Processors	1
Hard Disk (SCSI)	19.5 GB
Hard Disk 2 (SCSI)	488.3 GB
CD/DVD (IDE)	Using unknown backend
Network Adapter	Host-only
Network Adapter 2	Bridged (Automatic)
Display	Auto detect

Add...

Remove

Memory

Specify the amount of memory allocated to this virtual machine. The memory size must be a multiple of 4 MB.

Memory for this virtual machine: 4392 MB

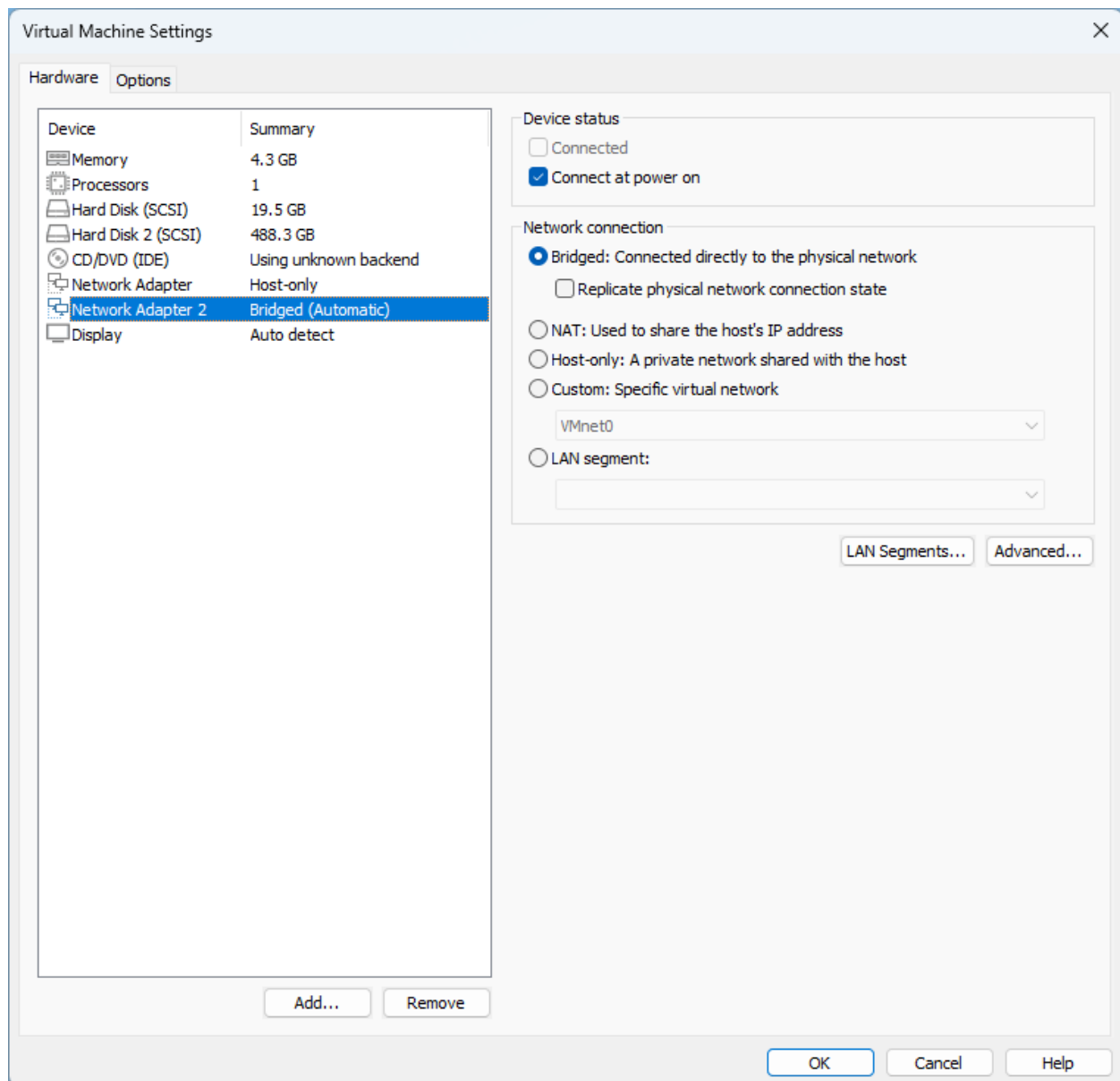
64 GB -
32 GB -
16 GB -
8 GB -
4 GB -
2 GB -
1 GB -
512 MB -
256 MB -
128 MB -
64 MB -
32 MB -
16 MB -
8 MB -
4 MB -

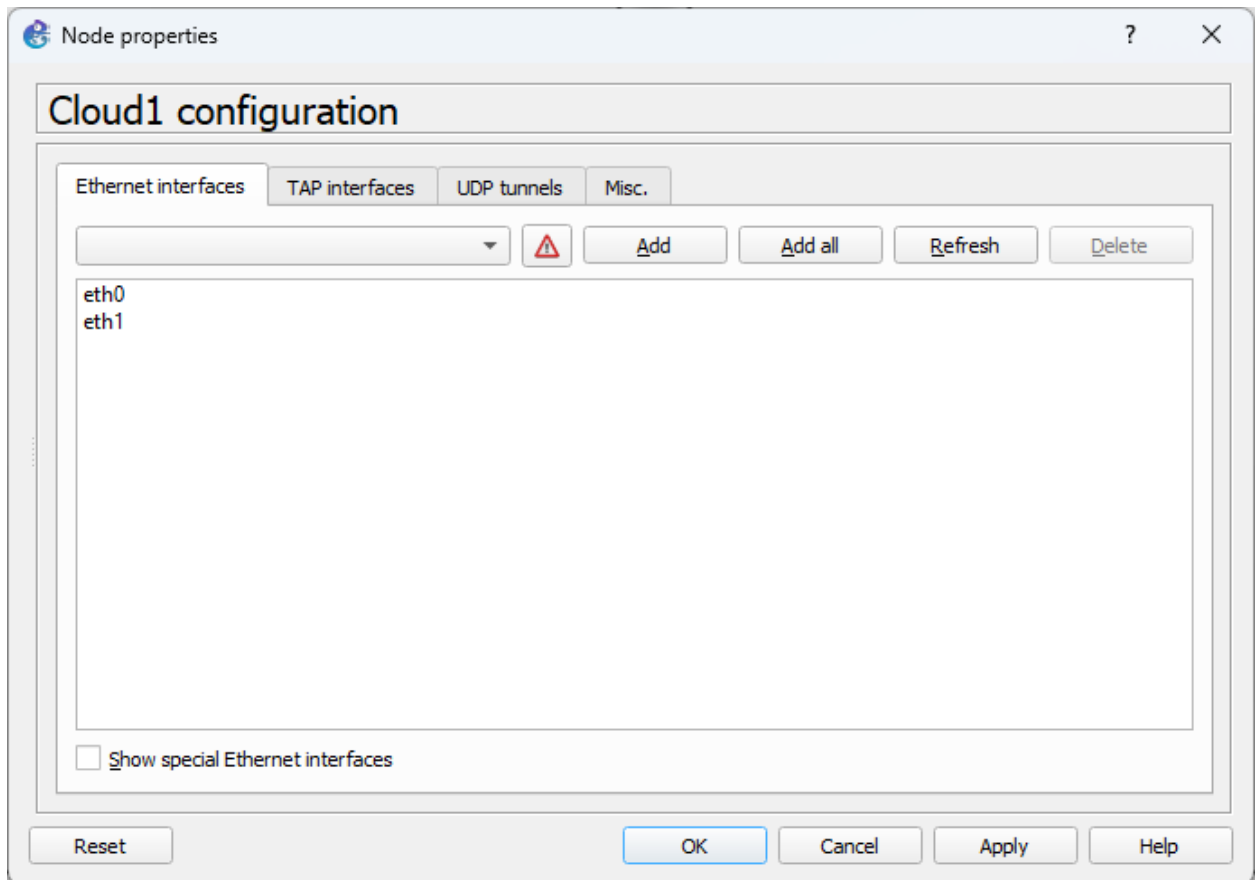
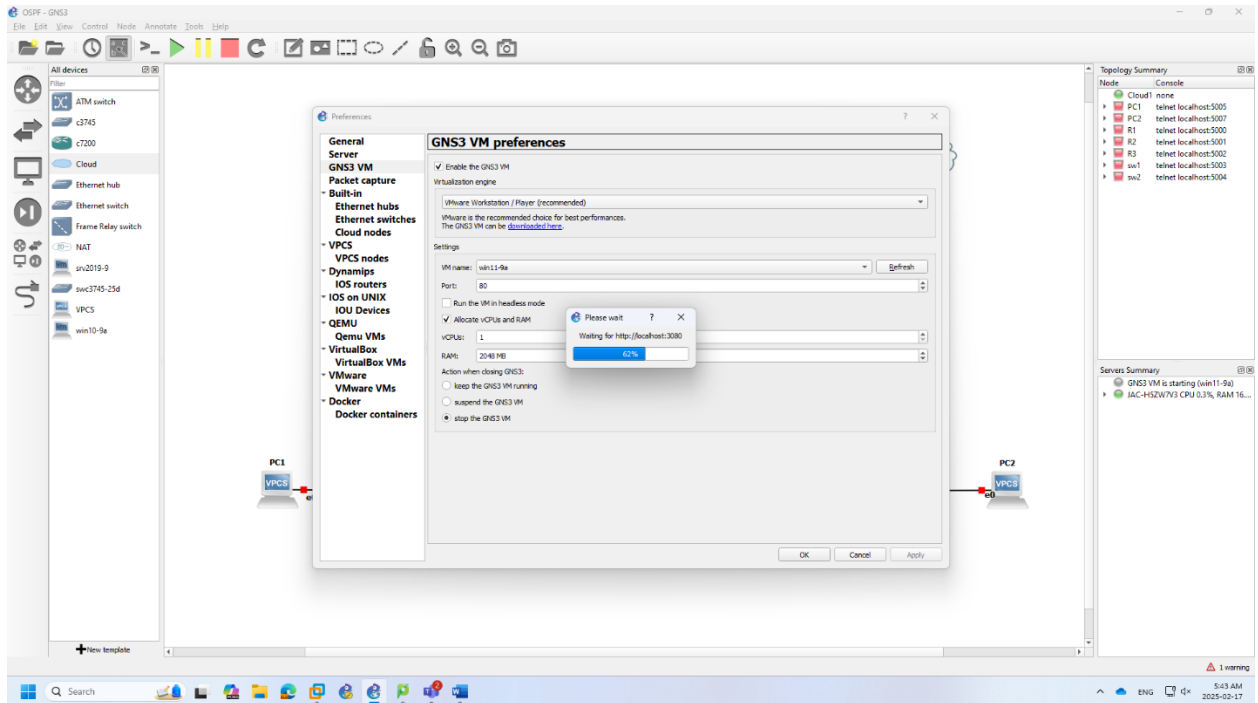
- Maximum recommended memory
(Memory swapping may occur beyond this size.)
55.7 GB
- Recommended memory
4 GB
- Guest OS recommended minimum
2 GB

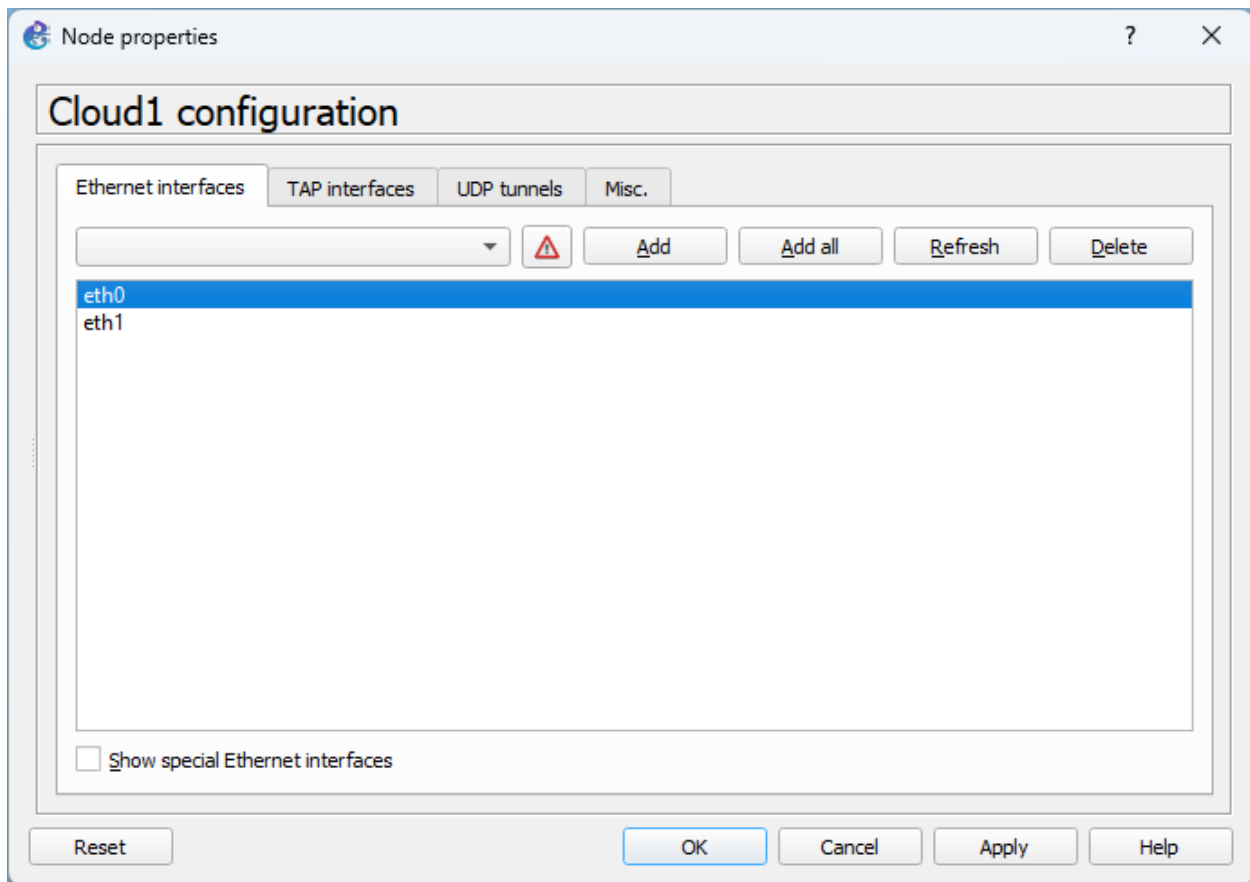
OK

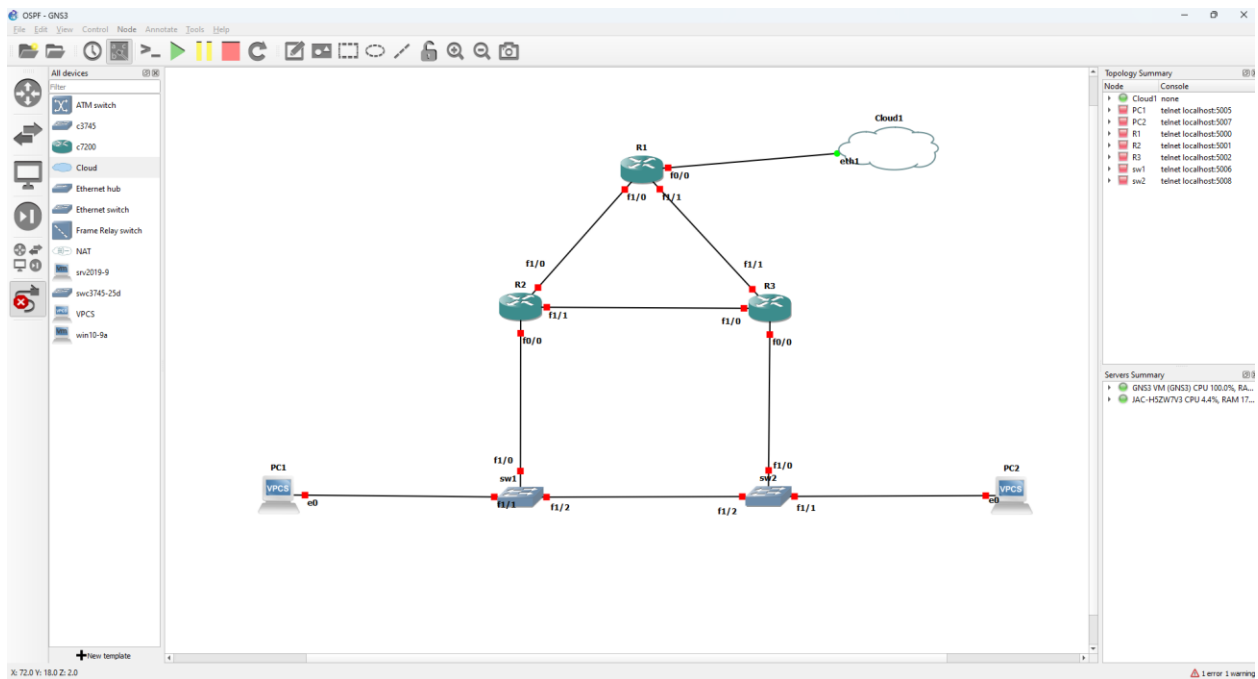
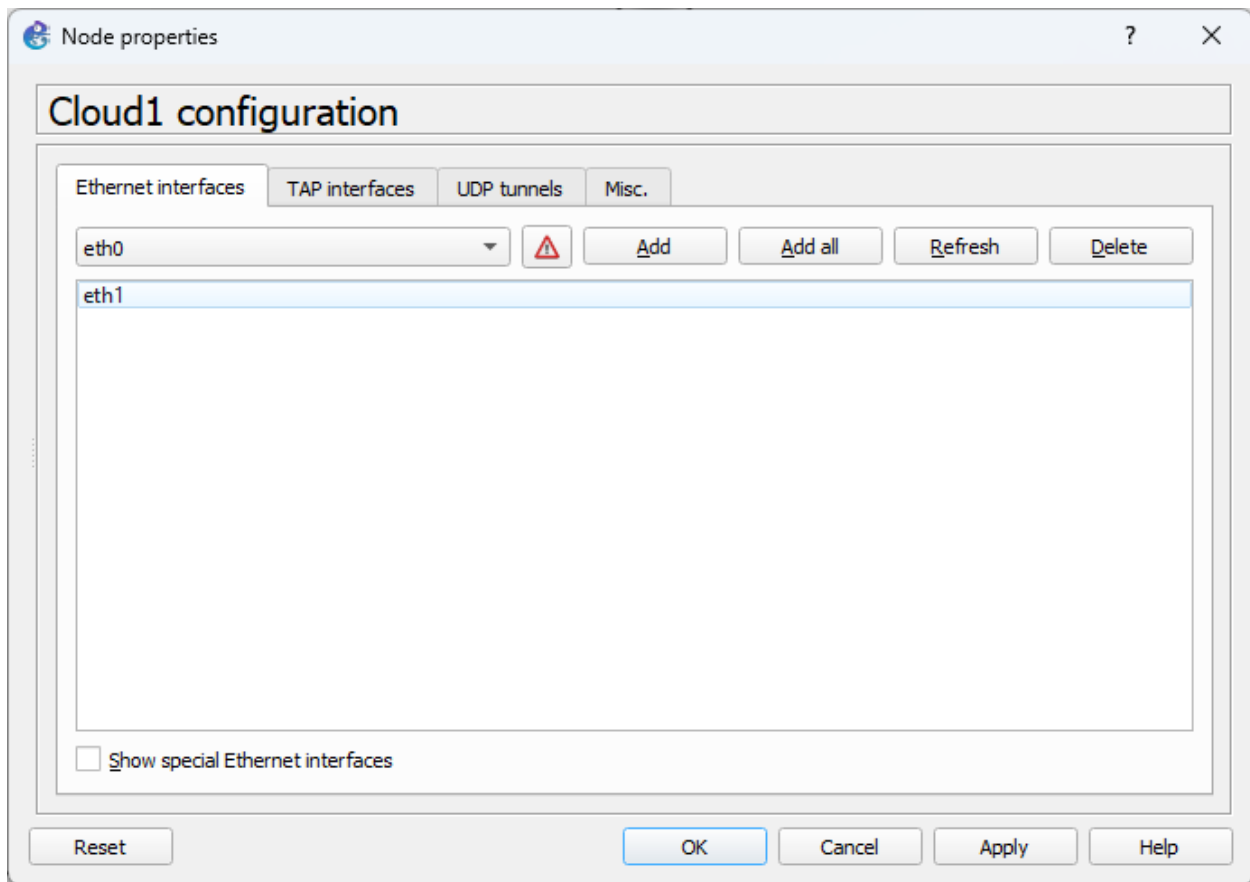
Cancel

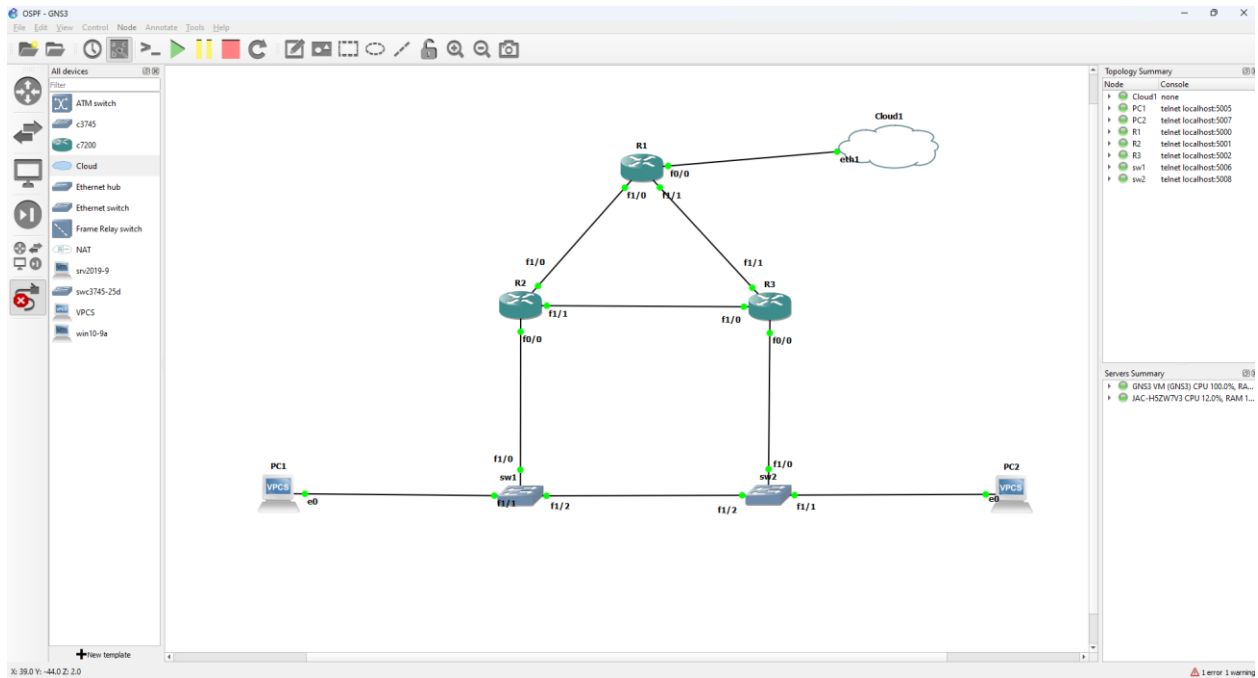
Help











PC1 - PuTTY

```
Welcome to Virtual PC Simulator, version 0.6.2
Dedicated to Daling.
Build time: Apr 10 2019 02:42:20
Copyright (c) 2007-2014, Paul Meng (mirnshi@gmail.com)
All rights reserved.

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 192.168.1.101 255.255.255.0
```

```
PC1 - PuTTY

Welcome to Virtual PC Simulator, version 0.6.2
Dedicated to Daling.
Build time: Apr 10 2019 02:42:20
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For more information, please visit wiki.freecode.com.cn.

Press '?' to get help.

Executing the startup file

PC1> ip 192.168.1.101 255.255.255.0
Checking for duplicate address...
PC1 : 192.168.1.101 255.255.255.0

PC1> █
```

```
PC1 - PuTTY

Welcome to Virtual PC Simulator, version 0.6.2
Dedicated to Daling.
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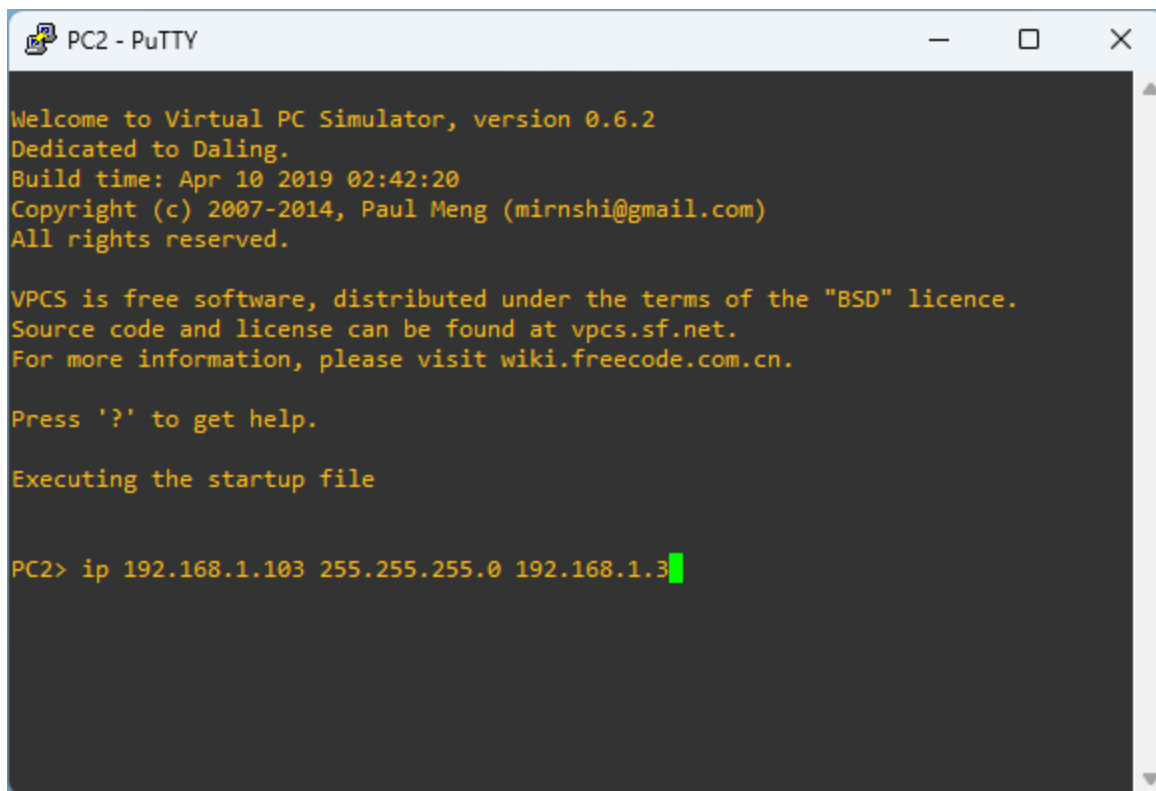
Press '?' to get help.

Executing the startup file

PC1> ip 192.168.1.101 255.255.255.0
Checking for duplicate address...
PC1 : 192.168.1.101 255.255.255.0

PC1> ip 192.168.1.101 255.255.255.0 192.168.1.1
Checking for duplicate address...
PC1 : 192.168.1.101 255.255.255.0 gateway 192.168.1.1

PC1> █
```



```
PC2 - PuTTY

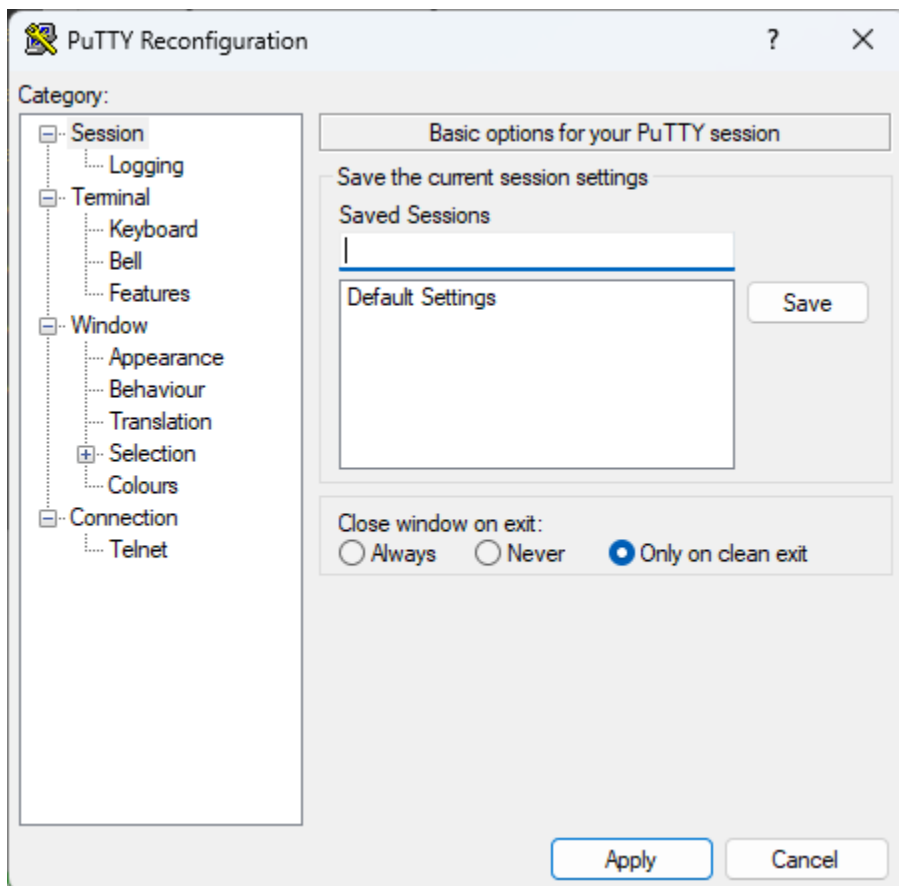
Welcome to Virtual PC Simulator, version 0.6.2
Dedicated to Daling.
Build time: Apr 10 2019 02:42:20
Copyright (c) 2007-2014, Paul Meng (mirnshi@gmail.com)
All rights reserved.

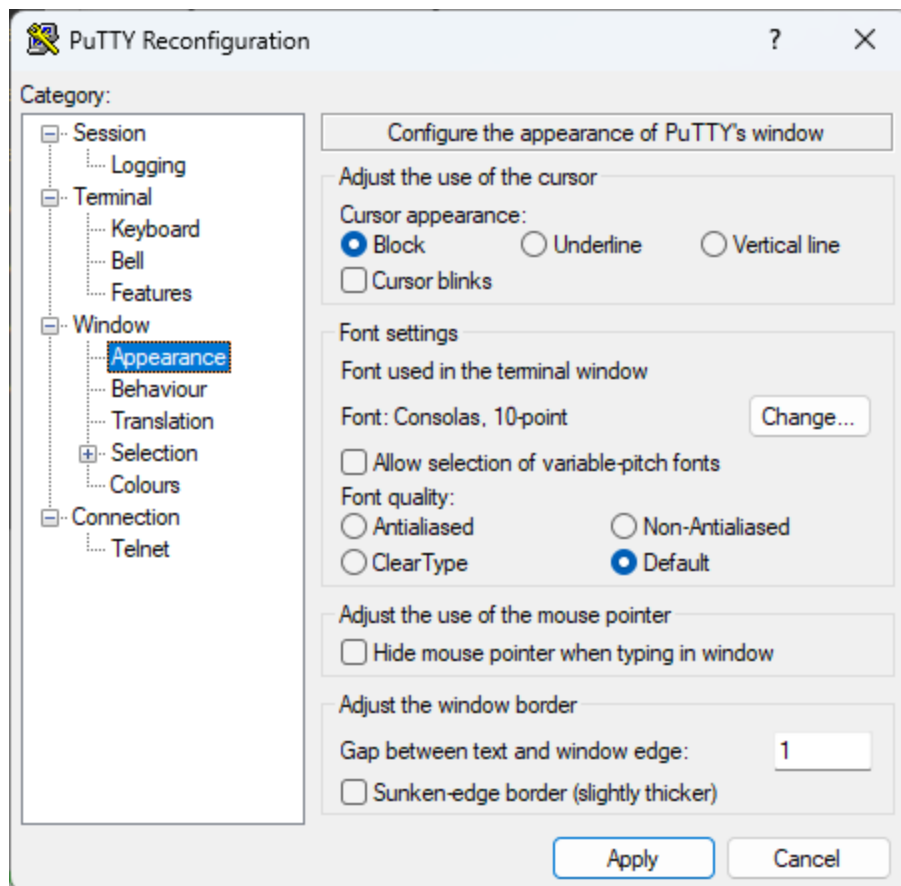
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Source code and license can be found at vpcs.sf.net.
For more information, please visit wiki.freecode.com.cn.

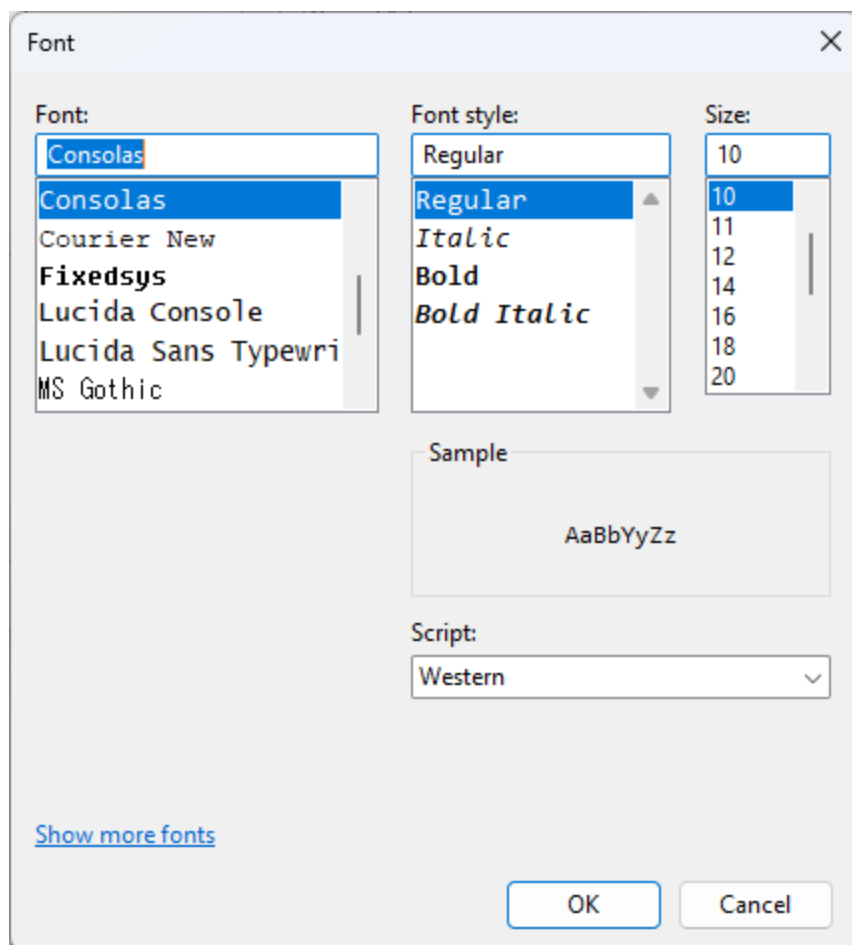
Press '?' to get help.

Executing the startup file

PC2> ip 192.168.1.103 255.255.255.0 192.168.1.3
```







```
R2
inistratively down
*Feb 17 06:41:57.311: %LINK-5-CHANGED: Interface Serial2/1, changed state to adm
inistratively down
*Feb 17 06:41:57.311: %LINK-5-CHANGED: Interface Serial2/2, changed state to adm
inistratively down
*Feb 17 06:41:57.311: %LINK-5-CHANGED: Interface Serial2/3, changed state to adm
inistratively down
*Feb 17 06:41:58.311: %LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthern
et0/0, changed state to down
*Feb 17 06:41:58.315: %LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthern
et1/0, changed state to down
*Feb 17 06:41:58.319: %LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthern
et1/1, changed state to down
*Feb 17 06:41:58.323: %LINEPROTO-5-UPDOWN: Line protocol on Interface Serial2/0,
changed state to down
*Feb 17 06:41:58.323: %LINEPROTO-5-UPDOWN: Line protocol on Interface Serial2/1,
changed state to down
*Feb 17 06:41:58.323: %LINEPROTO-5-UPDOWN: Line protocol on Interface Serial2/2,
changed state to down
*Feb 17 06:41:58.323: %LINEPROTO-5-UPDOWN: Line protocol on Interface Serial2/3,
changed state to down
R2#config t
Enter configuration commands, one per line. End with CNTL/Z.
R2(config)#enable secret cisco
```

```
R2
inistratively down
*Feb 17 06:41:57.311: %LINK-5-CHANGED: Interface Serial2/2, changed state to adm
inistratively down
*Feb 17 06:41:57.311: %LINK-5-CHANGED: Interface Serial2/3, changed state to adm
inistratively down
*Feb 17 06:41:58.311: %LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthern
et0/0, changed state to down
*Feb 17 06:41:58.315: %LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthern
et1/0, changed state to down
*Feb 17 06:41:58.319: %LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthern
et1/1, changed state to down
*Feb 17 06:41:58.323: %LINEPROTO-5-UPDOWN: Line protocol on Interface Serial2/0,
changed state to down
*Feb 17 06:41:58.323: %LINEPROTO-5-UPDOWN: Line protocol on Interface Serial2/1,
changed state to down
*Feb 17 06:41:58.323: %LINEPROTO-5-UPDOWN: Line protocol on Interface Serial2/2,
changed state to down
*Feb 17 06:41:58.323: %LINEPROTO-5-UPDOWN: Line protocol on Interface Serial2/3,
changed state to down
R2#config t
Enter configuration commands, one per line. End with CNTL/Z.
R2(config)#enable secret cisco
R2(config)#line vty 0 4
R2(config-line)#password vtp
```

```
R2
*Feb 17 06:41:57.311: %LINK-5-CHANGED: Interface Serial2/3, changed state to administratively down
*Feb 17 06:41:58.311: %LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to down
*Feb 17 06:41:58.315: %LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet1/0, changed state to down
*Feb 17 06:41:58.319: %LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet1/1, changed state to down
*Feb 17 06:41:58.323: %LINEPROTO-5-UPDOWN: Line protocol on Interface Serial2/0, changed state to down
*Feb 17 06:41:58.323: %LINEPROTO-5-UPDOWN: Line protocol on Interface Serial2/1, changed state to down
*Feb 17 06:41:58.323: %LINEPROTO-5-UPDOWN: Line protocol on Interface Serial2/2, changed state to down
*Feb 17 06:41:58.323: %LINEPROTO-5-UPDOWN: Line protocol on Interface Serial2/3, changed state to down
R2#config t
Enter configuration commands, one per line. End with CNTL/Z.
R2(config)#enable secret cisco
R2(config)#line vty 0 4
R2(config-line)#password vtp
R2(config-line)#login
R2(config-line)#exit
R2(config)#
```

```
R2
administratively down
*Feb 17 06:41:58.311: %LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to down
*Feb 17 06:41:58.315: %LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet1/0, changed state to down
*Feb 17 06:41:58.319: %LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet1/1, changed state to down
*Feb 17 06:41:58.323: %LINEPROTO-5-UPDOWN: Line protocol on Interface Serial2/0, changed state to down
*Feb 17 06:41:58.323: %LINEPROTO-5-UPDOWN: Line protocol on Interface Serial2/1, changed state to down
*Feb 17 06:41:58.323: %LINEPROTO-5-UPDOWN: Line protocol on Interface Serial2/2, changed state to down
*Feb 17 06:41:58.323: %LINEPROTO-5-UPDOWN: Line protocol on Interface Serial2/3, changed state to down
R2#config t
Enter configuration commands, one per line. End with CNTL/Z.
R2(config)#enable secret cisco
R2(config)#line vty 0 4
R2(config-line)#password vtp
R2(config-line)#login
R2(config-line)#exit
R2(config)#int fa 0/0
R2(config-if)#
```

```
R2
*Feb 17 06:41:58.311: %LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to down
*Feb 17 06:41:58.315: %LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet1/0, changed state to down
*Feb 17 06:41:58.319: %LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet1/1, changed state to down
*Feb 17 06:41:58.323: %LINEPROTO-5-UPDOWN: Line protocol on Interface Serial2/0, changed state to down
*Feb 17 06:41:58.323: %LINEPROTO-5-UPDOWN: Line protocol on Interface Serial2/1, changed state to down
*Feb 17 06:41:58.323: %LINEPROTO-5-UPDOWN: Line protocol on Interface Serial2/2, changed state to down
*Feb 17 06:41:58.323: %LINEPROTO-5-UPDOWN: Line protocol on Interface Serial2/3, changed state to down
R2#config t
Enter configuration commands, one per line. End with CNTL/Z.
R2(config)#enable secret cisco
R2(config)#line vty 0 4
R2(config-line)#password vtp
R2(config-line)#login
R2(config-line)#exit
R2(config)#int fa 0/0
R2(config-if)#ip address 192.168.1.1 255.255.255.0
R2(config-if)#
```

```
R2
changed state to down
*Feb 17 06:41:58.323: %LINEPROTO-5-UPDOWN: Line protocol on Interface Serial2/1, changed state to down
*Feb 17 06:41:58.323: %LINEPROTO-5-UPDOWN: Line protocol on Interface Serial2/2, changed state to down
*Feb 17 06:41:58.323: %LINEPROTO-5-UPDOWN: Line protocol on Interface Serial2/3, changed state to down
R2#config t
Enter configuration commands, one per line. End with CNTL/Z.
R2(config)#enable secret cisco
R2(config)#line vty 0 4
R2(config-line)#password vtp
R2(config-line)#login
R2(config-line)#exit
R2(config)#int fa 0/0
R2(config-if)#ip address 192.168.1.1 255.255.255.0
R2(config-if)#no shut
R2(config-if)#exit
R2(config)#
*Feb 17 07:22:41.435: %LINK-3-UPDOWN: Interface FastEthernet0/0, changed state to up
*Feb 17 07:22:42.435: %LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to up
R2(config)#
```



```
R2
*Feb 17 06:41:58.323: %LINEPROTO-5-UPDOWN: Line protocol on Interface Serial2/1,
changed state to down
*Feb 17 06:41:58.323: %LINEPROTO-5-UPDOWN: Line protocol on Interface Serial2/2,
changed state to down
*Feb 17 06:41:58.323: %LINEPROTO-5-UPDOWN: Line protocol on Interface Serial2/3,
changed state to down
R2#config t
Enter configuration commands, one per line. End with CNTL/Z.
R2(config)#enable secret cisco
R2(config)#line vty 0 4
R2(config-line)#password vtp
R2(config-line)#login
R2(config-line)#exit
R2(config)#int fa 0/0
R2(config-if)#ip address 192.168.1.1 255.255.255.0
R2(config-if)#no shut
R2(config-if)#exit
R2(config)#
*Feb 17 07:22:41.435: %LINK-3-UPDOWN: Interface FastEthernet0/0, changed state t
o up
*Feb 17 07:22:42.435: %LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthern
et0/0, changed state to up
R2(config)#int fa 1/0
R2(config-if)#
```

```
R2
*Feb 17 06:41:58.323: %LINEPROTO-5-UPDOWN: Line protocol on Interface Serial2/2,
changed state to down
*Feb 17 06:41:58.323: %LINEPROTO-5-UPDOWN: Line protocol on Interface Serial2/3,
changed state to down
R2#config t
Enter configuration commands, one per line. End with CNTL/Z.
R2(config)#enable secret cisco
R2(config)#line vty 0 4
R2(config-line)#password vtp
R2(config-line)#login
R2(config-line)#exit
R2(config)#int fa 0/0
R2(config-if)#ip address 192.168.1.1 255.255.255.0
R2(config-if)#no shut
R2(config-if)#exit
R2(config)#
*Feb 17 07:22:41.435: %LINK-3-UPDOWN: Interface FastEthernet0/0, changed state t
o up
*Feb 17 07:22:42.435: %LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthern
et0/0, changed state to up
R2(config)#int fa 1/0
R2(config-if)#ip address 10.1.1.1 255.255.255.0
R2(config-if)#ip address 10.1.1.1 255.255.255.252
R2(config-if)#
```

```
R2
changed state to down
*Feb 17 06:41:58.323: %LINEPROTO-5-UPDOWN: Line protocol on Interface Serial2/3,
changed state to down
R2#config t
Enter configuration commands, one per line. End with CNTL/Z.
R2(config)#enable secret cisco
R2(config)#line vty 0 4
R2(config-line)#password vtp
R2(config-line)#login
R2(config-line)#exit
R2(config)#int fa 0/0
R2(config-if)#ip address 192.168.1.1 255.255.255.0
R2(config-if)#no shut
R2(config-if)#exit
R2(config)#
*Feb 17 07:22:41.435: %LINK-3-UPDOWN: Interface FastEthernet0/0, changed state t
o up
*Feb 17 07:22:42.435: %LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthern
et0/0, changed state to up
R2(config)#int fa 1/0
R2(config-if)#ip address 10.1.1.1 255.255.255.0
R2(config-if)#ip address 10.1.1.1 255.255.255.252
R2(config-if)#no shut
R2(config-if)#
```

```
R2
R2(config-line)#password vtp
R2(config-line)#login
R2(config-line)#exit
R2(config)#int fa 0/0
R2(config-if)#ip address 192.168.1.1 255.255.255.0
R2(config-if)#no shut
R2(config-if)#exit
R2(config)#
*Feb 17 07:22:41.435: %LINK-3-UPDOWN: Interface FastEthernet0/0, changed state t
o up
*Feb 17 07:22:42.435: %LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthern
et0/0, changed state to up
R2(config)#int fa 1/0
R2(config-if)#ip address 10.1.1.1 255.255.255.0
R2(config-if)#ip address 10.1.1.1 255.255.255.252
R2(config-if)#no shut
R2(config-if)#
*Feb 17 07:27:12.687: %LINK-3-UPDOWN: Interface FastEthernet1/0, changed state t
o up
*Feb 17 07:27:13.687: %LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthern
et1/0, changed state to up
R2(config-if)#exit
R2(config)#exit
R2#
```

```
R2
o up
*Feb 17 07:22:42.435: %LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to up
R2(config)#int fa 1/0
R2(config-if)#ip address 10.1.1.1 255.255.255.0
R2(config-if)#ip address 10.1.1.1 255.255.255.252
R2(config-if)#no shut
R2(config-if)#
*Feb 17 07:27:12.687: %LINK-3-UPDOWN: Interface FastEthernet1/0, changed state to up
*Feb 17 07:27:13.687: %LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet1/0, changed state to up
R2(config-if)#exit
R2(config)#exit
R2#
*Feb 17 07:27:24.139: %SYS-5-CONFIG_I: Configured from console by console
R2#copy running-config startup-config
Destination filename [startup-config]?
Warning: Attempting to overwrite an NVRAM configuration previously written by a different version of the system image.
Overwrite the previous NVRAM configuration?[confirm]
Building configuration...
[OK]
R2#
```

```
R2#
R2#
R2#
R2#
R2#
R2#
R2#
R2#
R2#
R2#
R2#
R2#
R2#
R2#
R2#
R2#
R2#enable
R2#conf t
Enter configuration commands, one per line. End with CNTL/Z.
R2(config)#enable secret cisco
R2(config)#
```

```
R2#
R2#
R2#
R2#
R2#
R2#
R2#
R2#
R2#
R2#
R2#
R2#
R2#
R2#
R2#
R2#enable
R2#conf t
Enter configuration commands, one per line. End with CNTL/Z.
R2(config)#enable secret cisco
R2(config)#line vty 0 4
R2(config-line)#password vtp
R2(config-line)#
```

```
R2#
R2#
R2#
R2#
R2#
R2#
R2#
R2#
R2#
R2#
R2#
R2#
R2#
R2#
R2#enable
R2#conf t
Enter configuration commands, one per line. End with CNTL/Z.
R2(config)#enable secret cisco
R2(config)#line vty 0 4
R2(config-line)#password vtp
R2(config-line)#exit
R2(config)#int fa 1/0
R2(config-if)#
```

```
R2
R2(config-if)#
R2(config-if)#
R2(config-if)#
R2(config-if)#
R2(config-if)#
R2(config-if)#
R2(config-if)#
R2(config-if)#
R2(config-if)#
R2(config-if)#
R2(config-if)#
R2(config-if)#
R2(config-if)#
R2(config-if)#
R2(config-if)#
R2(config-if)#
R2(config-if)#
R2(config-if)#
R2(config-if)#ip address 10.1.1.2 255.255.255.252
R2(config-if)#
```

```
R2
R2(config-if)#
R2(config-if)#
R2(config-if)#
R2(config-if)#
R2(config-if)#
R2(config-if)#
R2(config-if)#
R2(config-if)#
R2(config-if)#
R2(config-if)#
R2(config-if)#
R2(config-if)#
R2(config-if)#
R2(config-if)#ip address 10.1.1.2 255.255.255.252
R2(config-if)#no shut
R2(config-if)#exit
R2(config)#
*Feb 17 08:17:10.195: %LINK-3-UPDOWN: Interface FastEthernet1/0, changed state t
o up
*Feb 17 08:17:11.195: %LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthern
et1/0, changed state to up
R2(config)#
```



```
R2
R2(config)#
R2(config)#
R2(config)#
R2(config)#
R2(config)#
R2(config)#
R2(config)#
R2(config)#
R2(config)#
R2(config)#
R2(config)#int fa 0/0
R2(config-if)#ip address dhcp
R2(config-if)#exit
R2(config)#exit
R2#
*Feb 17 08:24:38.843: %SYS-5-CONFIG_I: Configured from console by console
R2#copy running-config startup-config
Destination filename [startup-config]?
Warning: Attempting to overwrite an NVRAM configuration previously written
by a different version of the system image.
Overwrite the previous NVRAM configuration?[confirm]
Building configuration...
[OK]
R2#
```

```
R3
R3#
R3#
R3#
R3#
R3#conf t
Enter configuration commands, one per line. End with CNTL/Z.
R3(config)#enable password cisco
R3(config)#line vty 0 4
R3(config-line)#password vtp
R3(config-line)#login
R3(config-line)#exit
R3(config)#int f1/1
R3(config-if)#ipaddress 10.1.1.6 255.255.255.252
^
% Invalid input detected at '^' marker.

R3(config-if)#ip address 10.1.1.6 255.255.255.252
R3(config-if)#no shut
R3(config-if)#
*Feb 19 06:24:53.155: %LINK-3-UPDOWN: Interface FastEthernet1/1, changed state t
o up
*Feb 19 06:24:54.155: %LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthern
et1/1, changed state to up
R3(config-if)#
```



```
sw1
sw1(config-if)#
sw1(config-if)#
sw1(config-if)#
sw1(config-if)#
sw1(config-if)#
sw1(config-if)#
sw1(config-if)#
sw1(config-if)#
sw1(config-if)#
sw1(config-if)#
sw1(config-if)#
sw1(config-if)#
sw1(config-if)#
sw1(config-if)#
sw1(config-if)#
sw1(config-if)#
sw1(config-if)#exit
sw1(config)#ip default-gateway 192.168.1.1
sw1(config)#line vty 0 15
sw1(config-line)#password vtp
sw1(config-line)#login
sw1(config-line)#
```

```
sw1
sw1(config-if)#
sw1(config-if)#
sw1(config-if)#
sw1(config-if)#
sw1(config-if)#
sw1(config-if)#
sw1(config-if)#
sw1(config-if)#
sw1(config-if)#
sw1(config-if)#
sw1(config-if)#
sw1(config-if)#
sw1(config-if)#
sw1(config-if)#
sw1(config-if)#
sw1(config-if)#exit
sw1(config)#ip default-gateway 192.168.1.1
sw1(config)#line vty 0 15
sw1(config-line)#password vtp
sw1(config-line)#login
sw1(config-line)#exit
sw1(config)#
```

```
sw1
sw1(config-if)#
sw1(config-if)#
sw1(config-if)#
sw1(config-if)#
sw1(config-if)#exit
sw1(config)#ip default-gateway 192.168.1.1
sw1(config)#line vty 0 15
sw1(config-line)#password vtp
sw1(config-line)#login
sw1(config-line)#exit
sw1(config)#enable secret cisco
sw1(config)#copy running-config startup-config
      ^
% Invalid input detected at '^' marker.

sw1(config)#exit
sw1#
*Mar  1 01:06:11.143: %SYS-5-CONFIG_I: Configured from console by console
sw1#copy running-config startup-config
Destination filename [startup-config]?
Building configuration...
[OK]
sw1#
sw1#
```

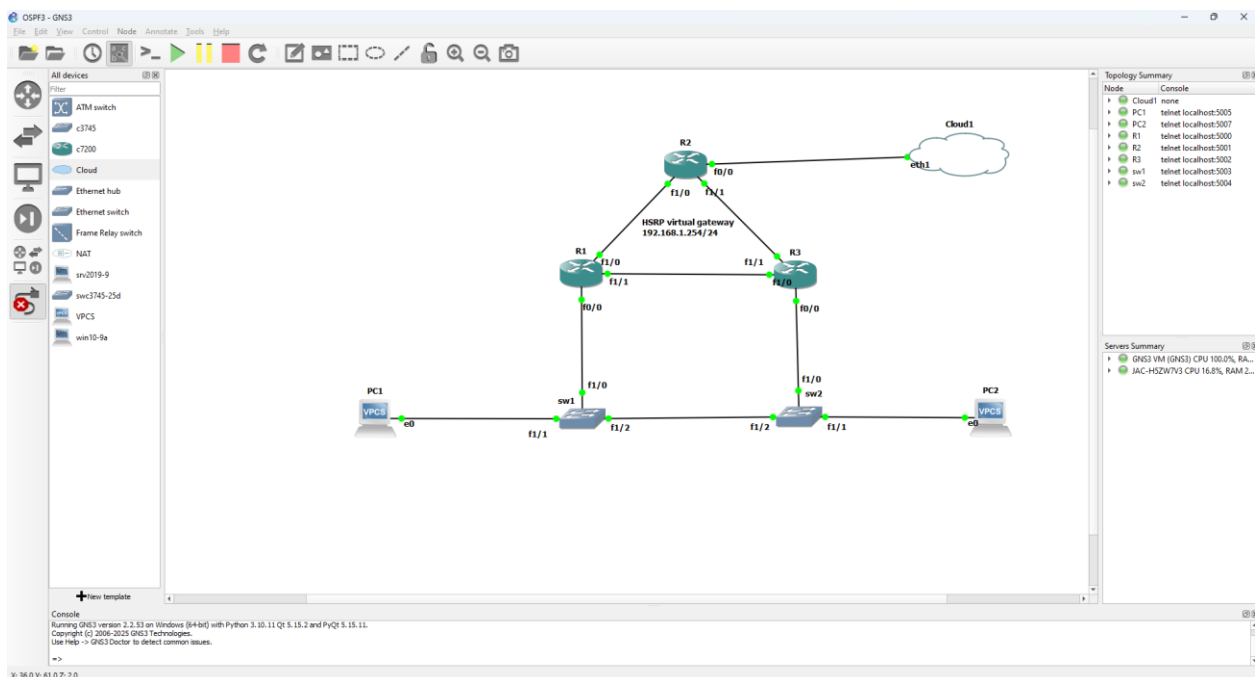
```
sw2
sw2#
sw2#
sw2#
sw2#
sw2#
sw2#enable secret cisco
      ^
% Invalid input detected at '^' marker.

sw2#conf t
Enter configuration commands, one per line.  End with CNTL/Z.
sw2(config)#enable secret cisco
sw2(config)#line vty 0 15
sw2(config-line)#secret vtp
      ^
% Invalid input detected at '^' marker.

sw2(config-line)#password vtp
sw2(config-line)#login
sw2(config-line)#exit
sw2(config)#int vlan 1
sw2(config-if)#ip address 192.168.1.13 255.255.255.0
sw2(config-if)#ip default-gateway 192.168.1.3
sw2(config)#
```

```
sw2
sw2#conf t
Enter configuration commands, one per line. End with CNTL/Z.
sw2(config)#enable secret cisco
sw2(config)#line vty 0 15
sw2(config-line)#secret vtp
^
% Invalid input detected at '^' marker.

sw2(config-line)#password vtp
sw2(config-line)#login
sw2(config-line)#exit
sw2(config)#int vlan 1
sw2(config-if)#ip address 192.168.1.13 255.255.255.0
sw2(config-if)#ip default-gateway 192.168.1.3
sw2(config)#exit
sw2#c
*Mar 1 01:14:26.995: %SYS-5-CONFIG_I: Configured from console by console
sw2#copy running-config startup-config
Destination filename [startup-config]?
Building configuration...
[OK]
sw2#
sw2#
sw2#
```



```
R1
R1#conf t
Enter configuration commands, one per line. End with CNTL/Z.
R1(config)#int f1/1
R1(config-if)#ip address 10.1.1.9 255.255.255.252
R1(config-if)#exit
R1(config)#int f1/1
R1(config-if)#no shut
R1(config-if)#
R1(config-if)#
*Feb 19 07:04:20.755: %LINK-3-UPDOWN: Interface FastEthernet1/1, changed state to up
R1(config-if)#exi
*Feb 19 07:04:21.755: %LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet1/1, changed state to up
R1(config-if)#exit
R1(config)#exit
R1#
*Feb 19 07:04:26.647: %SYS-5-CONFIG_I: Configured from console by console
R1#copy running-config startup-config
Destination filename [startup-config]?
Building configuration...
[OK]
R1#
R1#
```

```
R3
^
% Invalid input detected at '^' marker.
R3(config)#exit
R3#co
*Feb 19 06:27:33.507: %SYS-5-CONFIG_I: Configured from console by console
R3#copy running-config startup-config
Destination filename [startup-config]?
Warning: Attempting to overwrite an NVRAM configuration previously written by a different version of the system image.
Overwrite the previous NVRAM configuration?[confirm]
Building configuration...
[OK]
R3#conf t
Enter configuration commands, one per line. End with CNTL/Z.
R3(config)#int f1/0
R3(config-if)#ip address 10.1.1.10 255.255.255.252
R3(config-if)#no shut
R3(config-if)#
*Feb 19 07:05:52.787: %LINK-3-UPDOWN: Interface FastEthernet1/0, changed state to up
*Feb 19 07:05:53.787: %LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet1/0, changed state to up
R3(config-if)#
```

```
R1
o up
R1(config-if)#exi
*Feb 19 07:04:21.755: %LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet1/1, changed state to up
R1(config-if)#exit
R1(config)#exit
R1#
*Feb 19 07:04:26.647: %SYS-5-CONFIG_I: Configured from console by console
R1#copy running-config startup-config
Destination filename [startup-config]?
Building configuration...
[OK]
R1#
R1#router ospf 10
^
% Invalid input detected at '^' marker.

R1#conf t
Enter configuration commands, one per line. End with CNTL/Z.
R1(config)#router ospf 10
R1(config-router)#network 10.1.1.0 0.0.0.3 area 0
R1(config-router)#network 10.1.1.8 0.0.0.3 area 0
R1(config-router)#network 192.168.1.0 0.0.0.255 area 0
R1(config-router)#
```

```
R1
*Feb 19 07:04:21.755: %LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet1/1, changed state to up
R1(config-if)#exit
R1(config)#exit
R1#
*Feb 19 07:04:26.647: %SYS-5-CONFIG_I: Configured from console by console
R1#copy running-config startup-config
Destination filename [startup-config]?
Building configuration...
[OK]
R1#
R1#router ospf 10
^
% Invalid input detected at '^' marker.

R1#conf t
Enter configuration commands, one per line. End with CNTL/Z.
R1(config)#router ospf 10
R1(config-router)#network 10.1.1.0 0.0.0.3 area 0
R1(config-router)#network 10.1.1.8 0.0.0.3 area 0
R1(config-router)#network 192.168.1.0 0.0.0.255 area 0
R1(config-router)#exit
R1(config)#ip route 0.0.0.0 0.0.0.0 10.1.1.2
R1(config)#
```

```
R1
Destination filename [startup-config]?
Building configuration...
[OK]
R1#
R1#router ospf 10
      ^
% Invalid input detected at '^' marker.

R1#conf t
Enter configuration commands, one per line.  End with CNTL/Z.
R1(config)#router ospf 10
R1(config-router)#network 10.1.1.0 0.0.0.3 area 0
R1(config-router)#network 10.1.1.8 0.0.0.3 area 0
R1(config-router)#network 192.168.1.0 0.0.0.255 area 0
R1(config-router)#exit
R1(config)#ip route 0.0.0.0 0.0.0.0 10.1.1.2
R1(config)#exit
R1#
*Feb 19 08:13:22.783: %SYS-5-CONFIG_I: Configured from console by console
R1#copy running-config startup-config
Destination filename [startup-config]?
Building configuration...
[OK]
R1#
```

```
R3
Building configuration...
[OK]
R3#conf t
Enter configuration commands, one per line.  End with CNTL/Z.
R3(config)#int f1/0
R3(config-if)#ip address 10.1.1.10 255.255.255.252
R3(config-if)#no shut
R3(config-if)#
*Feb 19 07:05:52.787: %LINK-3-UPDOWN: Interface FastEthernet1/0, changed state to up
*Feb 19 07:05:53.787: %LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet1/0, changed state to up
R3(config-if)#exit
R3(config)#exit
R3#
*Feb 19 07:06:06.699: %SYS-5-CONFIG_I: Configured from console by console
R3#copy running-config startup-config
Destination filename [startup-config]?
Building configuration...
[OK]
R3#
R3#conf t
Enter configuration commands, one per line.  End with CNTL/Z.
R3(config)#
```

```
R3
R3(config-if)#no shut
R3(config-if)#
*Feb 19 07:05:52.787: %LINK-3-UPDOWN: Interface FastEthernet1/0, changed state to up
*Feb 19 07:05:53.787: %LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet1/0, changed state to up
R3(config-if)#exit
R3(config)#exit
R3#
*Feb 19 07:06:06.699: %SYS-5-CONFIG_I: Configured from console by console
R3#copy running-config startup-config
Destination filename [startup-config]?
Building configuration...
[OK]
R3#
R3#conf t
Enter configuration commands, one per line. End with CNTL/Z.
R3(config)#router ospf 10
R3(config-router)#network 10.1.1.8 0.0.0.3 area 0
R3(config-router)#network 10.1.1.8 0.0.0.3 area 0
*Feb 19 08:15:49.323: %OSPF-5-ADJCHG: Process 10, Nbr 192.168.1.1 on FastEthernet1/0 from LOADING to FULL, Loading Done
R3(config-router)#network 10.1.1.4 0.0.0.3 area 0
R3(config-router)#
```

```
R3
R3(config-if)#
*Feb 19 07:05:52.787: %LINK-3-UPDOWN: Interface FastEthernet1/0, changed state to up
*Feb 19 07:05:53.787: %LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet1/0, changed state to up
R3(config-if)#exit
R3(config)#exit
R3#
*Feb 19 07:06:06.699: %SYS-5-CONFIG_I: Configured from console by console
R3#copy running-config startup-config
Destination filename [startup-config]?
Building configuration...
[OK]
R3#
R3#conf t
Enter configuration commands, one per line. End with CNTL/Z.
R3(config)#router ospf 10
R3(config-router)#network 10.1.1.8 0.0.0.3 area 0
R3(config-router)#network 10.1.1.8 0.0.0.3 area 0
*Feb 19 08:15:49.323: %OSPF-5-ADJCHG: Process 10, Nbr 192.168.1.1 on FastEthernet1/0 from LOADING to FULL, Loading Done
R3(config-router)#network 10.1.1.4 0.0.0.3 area 0
R3(config-router)#ip route 0.0.0.0 0.0.0.0 10.1.1.5
R3(config)#
```

```
R3
R3#copy running-config startup-config
Destination filename [startup-config]?
Building configuration...
[OK]
R3#
R3#conf t
Enter configuration commands, one per line. End with CNTL/Z.
R3(config)#router ospf 10
R3(config-router)#network 10.1.1.8 0.0.0.3 area 0
R3(config-router)#network 10.1.1.8 0.0.0.3 area 0
*Feb 19 08:15:49.323: %OSPF-5-ADJCHG: Process 10, Nbr 192.168.1.1 on FastEthernet1/0 from LOADING to FULL, Loading Done
R3(config-router)#network 10.1.1.4 0.0.0.3 area 0
R3(config-router)#ip route 0.0.0.0 0.0.0.0 10.1.1.5
R3(config)#exit
R3#
*Feb 19 08:16:52.023: %SYS-5-CONFIG_I: Configured from console by console
R3#copy running-config startup-config
Destination filename [startup-config]?
Building configuration...
[OK]
R3#
R3#
R3#
```

```
R2
Destination filename [startup-config]?
Warning: Attempting to overwrite an NVRAM configuration previously written
by a different version of the system image.
Overwrite the previous NVRAM configuration?[confirm]
Building configuration...
[OK]
R2#conf t
Enter configuration commands, one per line. End with CNTL/Z.
R2(config)#router ospf 10
R2(config-router)#network 10.1.1.0 0.0.0.3 area 0
R2(config-router)#
*Feb 19 08:18:51.751: %OSPF-5-ADJCHG: Process 10, Nbr 192.168.1.1 on FastEthernet1/0 from LOADING to FULL, Loading Done
R2(config-router)#network 10.1.1.0 0.0.0.3 area0
^
% Invalid input detected at '^' marker.

R2(config-router)#network 10.1.1.0 0.0.0.3 area 0
R2(config-router)#network 10.1.1.0 0.0.0.3 area 0
R2(config-router)#network 10.1.1.0 0.0.0.4 area 0
% OSPF: Invalid address/mask combination (discontiguous mask)
R2(config-router)#int f0/0
R2(config-if)#no shut
R2(config-if)#
```