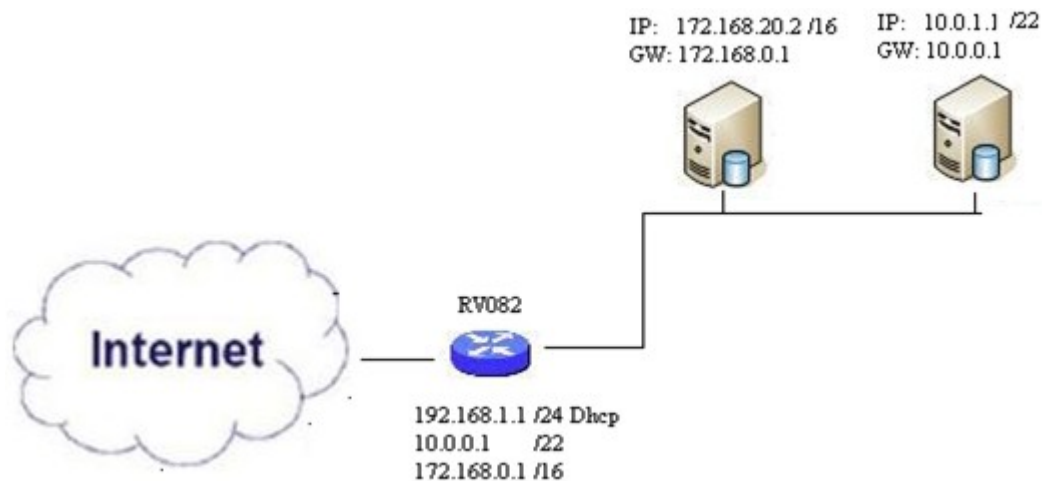


# Connect Clients with Class A and B Subnets to the RV016, RV042, RV042G and RV082 VPN Routers

## Objective

This document explains how to connect two clients with Class A and B subnets to the RV042, RV042G and RV082 VPN Routers. The topology used to represent the situation is as follows:



## Applicable Devices

- RV016
- RV042
- RV042G
- RV082

## Software Version

- v4.2.2.08

## Connect Clients in Multiple Subnets

Step 1. Log in to the web configuration utility and choose **Setup > Network**. The *Network* page opens:

IPv4 IPv6

**LAN Setting**

MAC Address : 54:75:D0:F7:FC:38

Device IP Address : 192.168.1.1

Subnet Mask : 255.255.255.224

Multiple Subnet :  Enable **Add/Edit**

Subnet 1 : 192.168.2.1/255.255.255.0

Step 2. Check the **Enable** check box to enable Multiple Subnets.

Step 3. Click **Add/Edit** to add or edit multiple subnets. The *Multiple Subnet Management* window appears.

LAN IP Address :

Subnet Mask :

**Add to list**

10.0.0.1/255.255.252.0

**Delete** **Add New**

**OK** **Cancel** **Close**

Step 4. Enter the LAN address in the **LAN IP Address** field. For example, if you want the same configuration as is shown in the objective, enter 10.0.0.1.

Step 5. Enter the Subnet Mask in the **Subnet Mask** field. For the example above, enter 255.255.252.0.

Step 6. Click **Add to List** to enter the fields into the list.

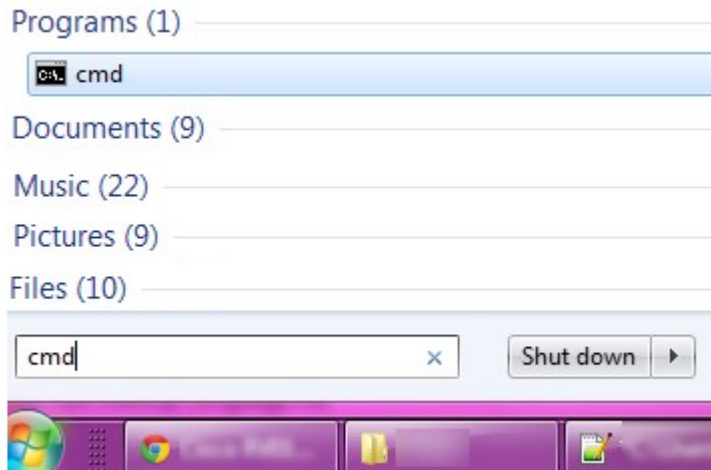
Step 7. (Optional) To delete a subnet, choose it from the table and click **Delete**.

Step 8. Click **Save** once you are finished to save the settings.

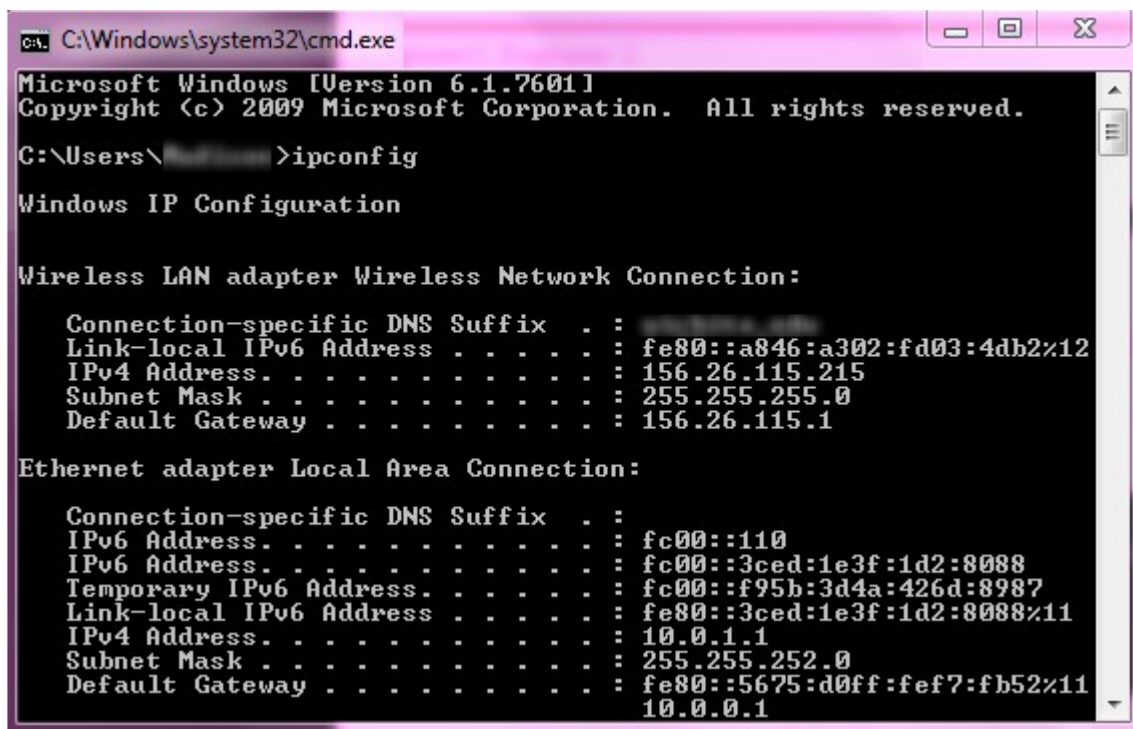
## Verify the Configuration

**NOTE:** This Configuration is applicable only for Windows operating systems

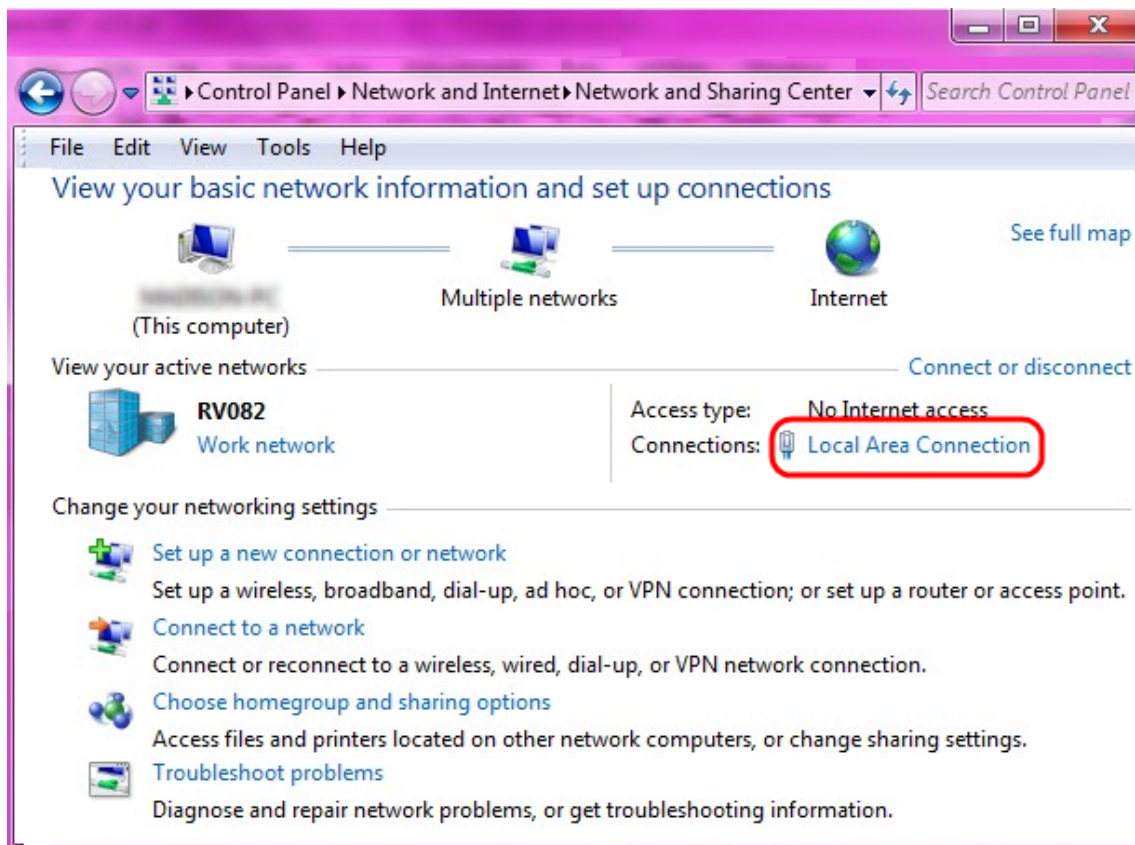
Step 9. Type **cmd** into the search bar of the first client and choose the option to open the *Command Prompt* window.



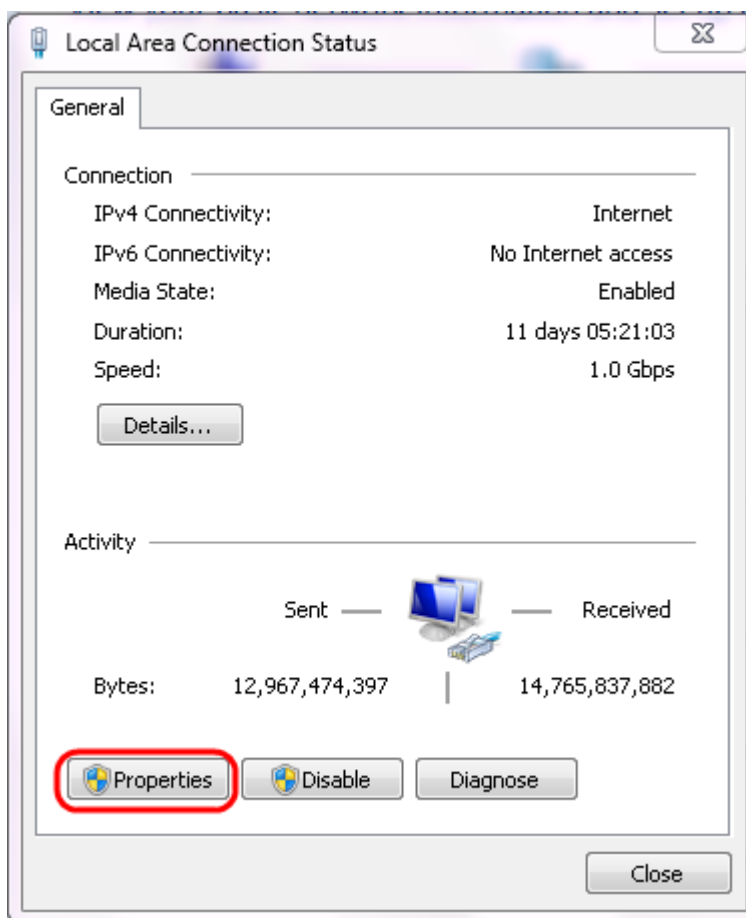
Step 10. Type in the command **ipconfig** and press **Enter**. Under the Ethernet Adapter Local Area Connection area, check if the IP address and subnet mask match with the routers configuration. If the IP addresses match skip to [Step 20](#).



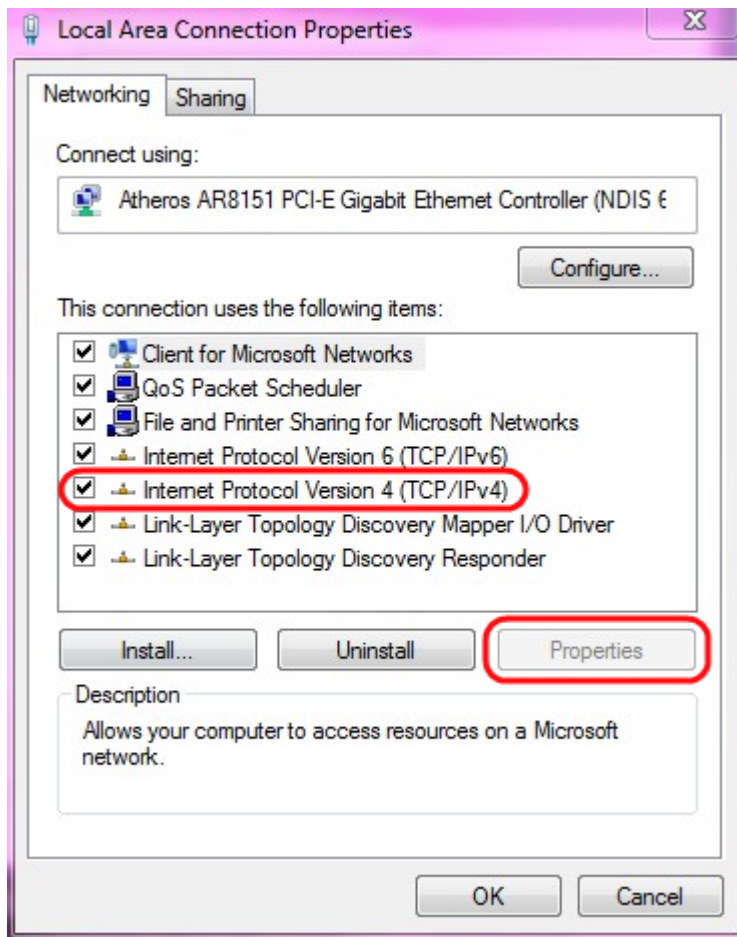
Step 11. If the IP addresses do not match, navigate to **Control Panel > Network and Internet > Network and Sharing Center**.



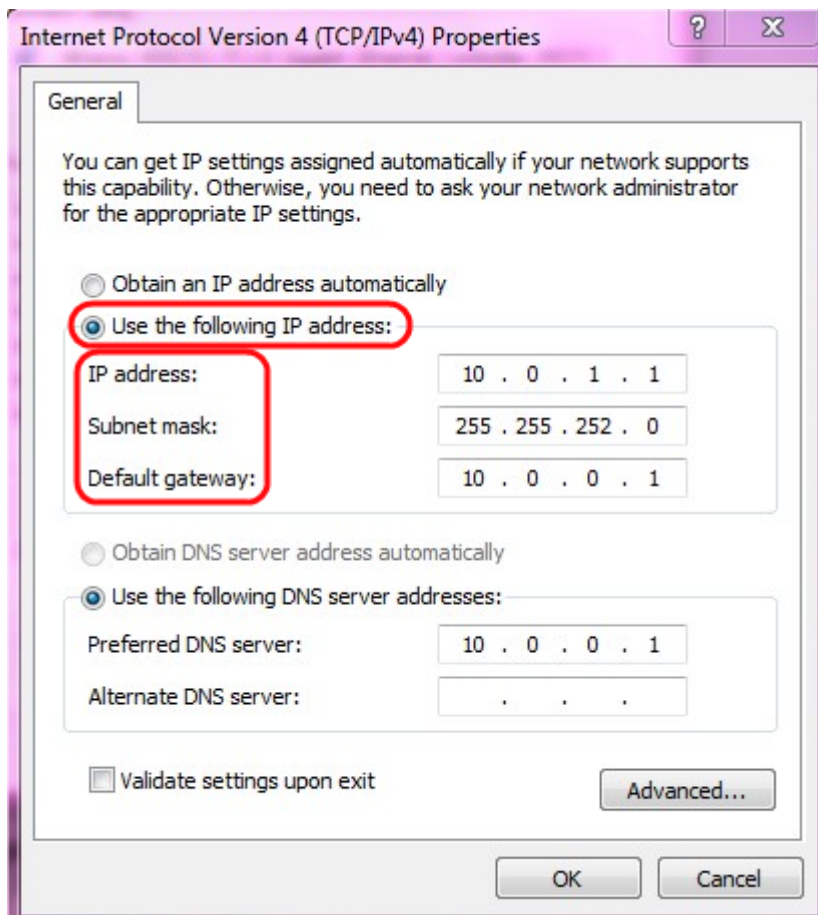
Step 12. Locate the network supplied by the RV042/RV082. Click **Local Area Connection** to the right of the RV042/RV082 network. The *Local Area Connection Status* window appears.



Step 13. Click **Properties**. The *Local Area Connection Properties* window appears.



Step 14. Choose **Internet Protocol Version 4 (TCP/IPv4)** and click **Properties** to open the *Internet Protocol Version 4 (TCP/IPv4) Properties* window.



Step 15. Click the **Use the following IP address** radio button and you are now able to configure your IP address, subnet mask, and default gateway for that LAN connection.

Step 16. Enter the desired IP address of the device into the *IP address* field (10.0.1.1).

Step 17. Enter the corresponding subnet mask into the *Subnet mask* field (255.255.252.0).

Step 18. Enter the desired gateway into the *Default Gateway* field (10.0.0.1). This is address that the client will use to communicate with clients outside its subnet, and should typically be the IP Address specified in Step 4.

Step 19. Repeat Steps 6 through 15 for your additional clients.

Step 20. To verify that this setup works, send out a ping through command prompt through both of the clients. Use the command **ping** followed by any web address you want to ping to check if the network works

```
Microsoft Windows [Version 6.2.9200]
(c) 2012 Microsoft Corporation. All rights reserved.

C:\Windows\system32>ping www.cisco.com

Pinging e144.dsch.akamaiedge.net [23.79.192.170] with 32 bytes of data:
Reply from 23.79.192.170: bytes=32 time=22ms TTL=53
Reply from 23.79.192.170: bytes=32 time=26ms TTL=53
Reply from 23.79.192.170: bytes=32 time=21ms TTL=53
Reply from 23.79.192.170: bytes=32 time=23ms TTL=53

Ping statistics for 23.79.192.170:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 21ms, Maximum = 26ms, Average = 23ms

C:\Windows\system32>_
```