

Windows Vista or Window 7: unable to automatically obtain an IP address to connect to the APNK Wifi

The following steps should only be taken IF your laptop has the specified problem outlined below AND you are running Windows Vista or Windows 7.

This documents assumed you have already completed our WiFi Troubleshooting Checklist – you must complete that first before following the instructions in this document.

<http://www.aotearoapeoplesnetwork.info/faq/wifi-troubleshooting>

The Aotearoa People's Network Kaharoa and participating partners take no responsibility for the changes that you may choose to apply to your laptop based on the info in this document.

Problem:

I have a Windows Vista or Windows 7 laptop that cannot connect to the APNK WiFi network BECAUSE my laptop cannot obtain an IP address automatically.

How do I verify my laptop has this specific problem?

a) Check what version of Windows your laptop has:

- Go to System settings: shortcut key **Windows + Pause/Break**
OR Windows button | Control Panel | System and Security | System
- Windows edition will specify what flavour of Windows your laptop is running

b) Yes, your laptop is running Vista or Windows 7 – now check the IP address of your laptop

- Select the Windows button
- Type **cmd** in the search box
- A black box opens – type **ipconfig** in the black box
- Scroll up until you can see **IPv4 Address**

it SHOULD have an IP address beginning 10.10.10.

IF it has an IP address beginning 169.254 your laptop is not acquiring an IP address automatically which prevents access to the WiFi network.

Please double check (using the Wifi Troubleshooting Checklist) that your laptop does NOT have a fixed IP address before continuing.

<http://www.aotearoapeoplesnetwork.info/faq/wifi-troubleshooting>

A Possible Fix

If you believe your laptop, which is running Vista or Windows 7, can't obtain an IP Address automatically you may wish to try the following steps.

A) Turn Internet Protocol v6 (TCP/IPv6) OFF

1. Select the Windows button
2. Control Panel
3. Network and Internet
4. Network and Sharing Centre
5. Change adapter settings (option on the left hand side)
6. Right click Wireless Network Connection
7. Select Properties
8. Untick Internet Protocol Version 6 (TCP/IPv6)

B) Disable DHCP Broadcast

Detail here: <http://support.microsoft.com/kb/928233>

Important This section, method, or task contains steps that tell you how to modify the registry. However, serious problems might occur if you modify the registry incorrectly. Therefore, make sure that you follow these steps carefully. For added protection, back up the registry before you modify it. Then, you can restore the registry if a problem occurs. For more information about how to back up and restore the registry, click the following article number to view the article in the Microsoft Knowledge Base:

[322756](http://support.microsoft.com/kb/322756/) (<http://support.microsoft.com/kb/322756/>) How to back up and restore the registry in Windows

1. Select the Windows button
2. Type **regedit** in the search box
3. If you are prompted for an administrator password or for confirmation, type your password, or click Continue or Yes.
4. Locate
HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\Tcpip\Parameters\Interfaces\{GUID}
To do this double click the folders on the left hand side of the registry
 - *HKEY_LOCAL_MACHINE*
 - *SYSTEM*
 - *CurrentControlSet*
 - *Services*
 - *Tcpip*
 - *Parameters*
 - *Interfaces*- click the (GUID) subkey that corresponds to the network adapter that is connected to the wifi network (it should have your current IP address listed in one of the sub keys)
5. Edit menu, point to New, and then click DWORD (32-bit) Value
6. In the New Value #1 box, type DhcpConnEnableBcastFlagToggle, and then press ENTER
7. Right-click DhcpConnEnableBcastFlagToggle, and then click Modify
8. In the Value data box, type 1, and then click OK
9. Close regedit.

It is also recommended that you make this registry change ...

C) Disable DHCP Broadcast

- Select the Windows button
- Type **regedit** in the search box
- If you are prompted for an administrator password or for confirmation, type your password, or click Continue or Yes.
- Go to the following location:
HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\Tcpip\Parameters
- Right click this entry and select New Dword (32 bit)
- Rename the new entry ArpRetryCount (leave it set to 0 by default)
- Close regedit.

After these changes are made **restart** your laptop and try reconnecting to the wireless service.