



Microsoft Loopback Adapter

From: [Any tips for Windows XP \(and newer\) users? \(TreeWalk DNS FAQ\)](#) *

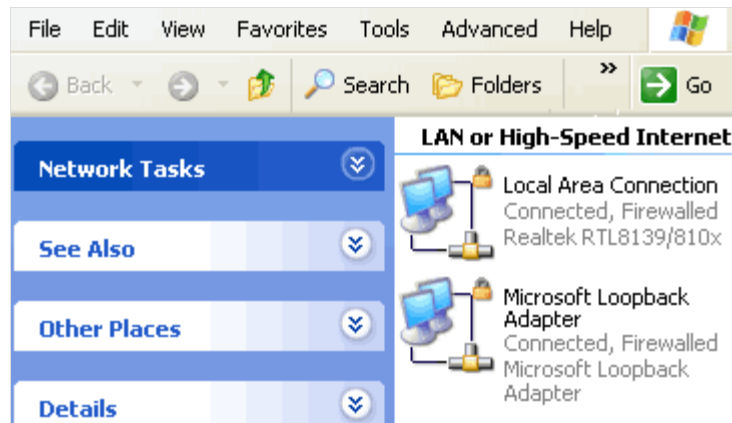
Installing the Loopback Adapter

Due to changes in the network stack, Windows XP, 2003 (and later) may not perform well if you use 127.0.0.1 as the DNS address. If you experience excessive CPU usage with TreeWalk because of this, you could try the following:

- Uninstall TreeWalk, reboot
- To manually install the Microsoft Loopback adapter in Windows XP, follow these steps from the Microsoft site (<http://support.microsoft.com/kb/839013>):
 1. Click **Start**, and then click **Control Panel**.
 2. If you are in Classic view, click **Switch to Category View** under **Control Panel** in the left pane.
 3. Double-click **Printers and Other Hardware**, and then click **Next**.
 4. Under **See Also** in the left pane, click **Add Hardware**, and then click **Next**.
 5. Click **Yes, I have already connected the hardware**, and then click **Next**.
 6. At the bottom of the list, click **Add a new hardware device**, and then click **Next**.
 7. Click **Install the hardware that I manually select from a list**, and then click **Next**.
 8. Click **Network adapters**, and then click **Next**.
 9. In the **Manufacturer** box, click **Microsoft**.
 10. In the **Network Adapter** box, click **Microsoft Loopback Adapter**, and then click **Next**.
 11. Click **Finish**.
- Open the newly installed adapter properties and setup its TCP settings using a subnet different from any other subnet you're using and save the new settings (our choice for this example will be 172.31.254.254 with a subnet mask of 255.255.255.0)
- Now proceed installing TreeWalk with all adapters enabled and once the setup completes, reboot the machine, then edit your TCP settings and replace the DNS address from 127.0.0.1 to the address you used for your loopback adapter (e.g. 172.31.254.254)
- Reboot again and you'll be up and running

Another alternative may be to apply this patch (<http://support.microsoft.com/default.aspx?scid=kb;en-us;884020>) listed at the Microsoft Knowledge Base.

To open the Network Connections Applet click the **Start button**, click **Control Panel** and then double-click **Network Connections**. The graphics below start at the opened applet with a loopback adapter already created.



Network Connections

In "Network Connections", you will find the properties for the Microsoft Loopback Adapter by right-clicking its icon and selecting "Properties". (The "Microsoft Loopback Adapter" shown here was renamed from "Local Area Connection 2" to simplify this FAQ.) The properties you'll need to assign are displayed next.

General

You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.

Obtain an IP address automatically

Use the following IP address:

IP address:

Subnet mask:

Default gateway:

Obtain DNS server address automatically

Use the following DNS server addresses:

Preferred DNS server:

Alternate DNS server:

Advanced...

OK Cancel

Microsoft Loopback Adapter

For the "Microsoft Loopback Adapter" the IP address is set to 172.31.254.254 and the subnet mask is 255.255.255.0. The "Preferred DNS Server" is TreeWalk's 127.0.0.1 address. The Microsoft Loopback Adapter requires a non-routable IP address that will not conflict with the Local Area Connection's network. Two examples of properties for the Local Area Connection are given next - choose the one that's closest to your own if you're unsure.

General **Alternate Configuration**

You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.

Obtain an IP address automatically

Use the following IP address:

IP address:

Subnet mask:

Default gateway:

Obtain DNS server address automatically

Use the following DNS server addresses:

Preferred DNS server:

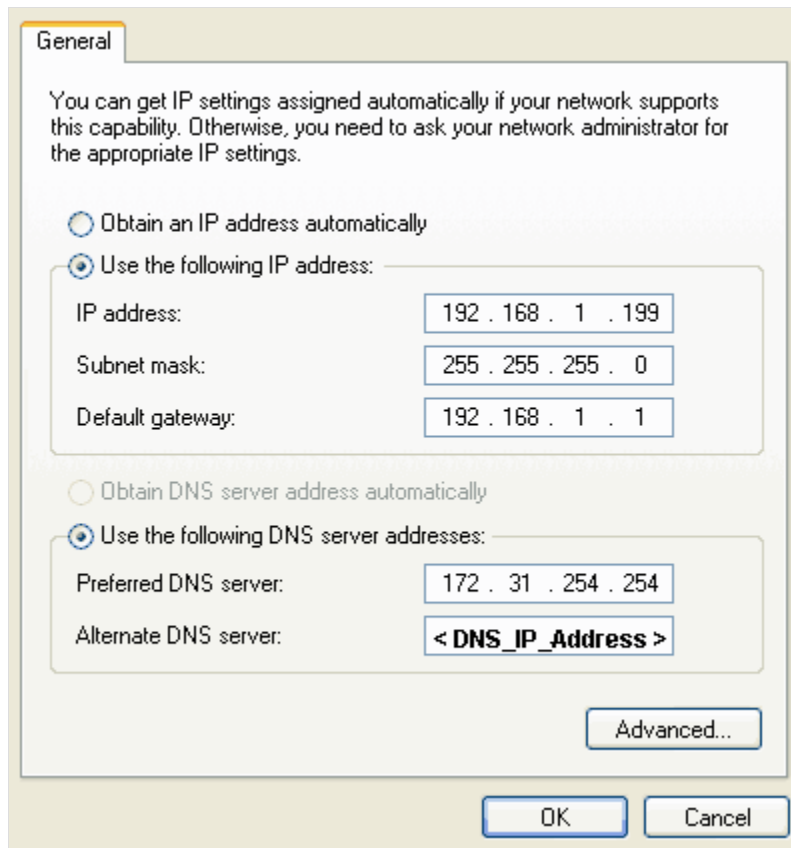
Alternate DNS server:

Advanced...

OK Cancel

Local Area Connection - DHCP

If you use automatic address assignments instead of the static addressing mentioned below, a DNS IP Address may have been placed into the "Alternate DNS server" field by the TreeWalk installation. Leave this entry untouched and only change the "Preferred DNS Server" address from 127.0.0.1 to the Microsoft Loopback Adapter's address of "172.31.254.254".



Local Area Connection - Static IP

This "Local Area Connection" example shows a static IP address that is recognized by a router and uses a subnet mask of "255.255.255.0". The router's gateway address is entered and the "Preferred DNS Server" must still point to the Microsoft Loopback Adapter's address at "172.31.254.254". The other settings will vary for different systems. Again, it is suggested to leave the DNS IP Address entry for the "Alternate DNS server" untouched unless you're sure of what you're doing.

Usage: With both adapters enabled your connection will be routed through the loopback adapter. If you disable or remove the Microsoft Loopback Adapter you will not be able to connect to the Internet unless you change the "Preferred DNS Server" back to 127.0.0.1 for the "Local Area Connection".

Uninstalling the Loopback Adapter

To remove the Microsoft Loopback Adapter, right-click the "My Computer" icon, select "Properties", open the "Hardware" tab, press the "Device Manager" button, scroll to and expand "Network adapters", right-click the "Microsoft Loopback Adapter" you wish to delete and select "Uninstall". Reverse any changes you've made to the Local Area Connection.

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This Portable Document File will print five pages adequately for reference purposes but you may need to use the zoom controls of your PDF reader for suitable off-line viewing.