

Setting up an Ethernet Crossover Network to move Folders and Files between two computers without the need to use peripherals.

I have looked at this since many members now have a Desktop and a laptop. One of the problems seems to be when the new computer is purchased there is considerable "stuff" which we would like to move to the new computer. Another reason being that when we are on holiday, using our cameras, downloading photos to the laptop, then wanting an easy way to place these photos on the desktop upon arriving home.

I hope this tutorial will be of some help.

We cannot use an ordinary Ethernet cable. That is the cable which plugs into the Broadband slot.

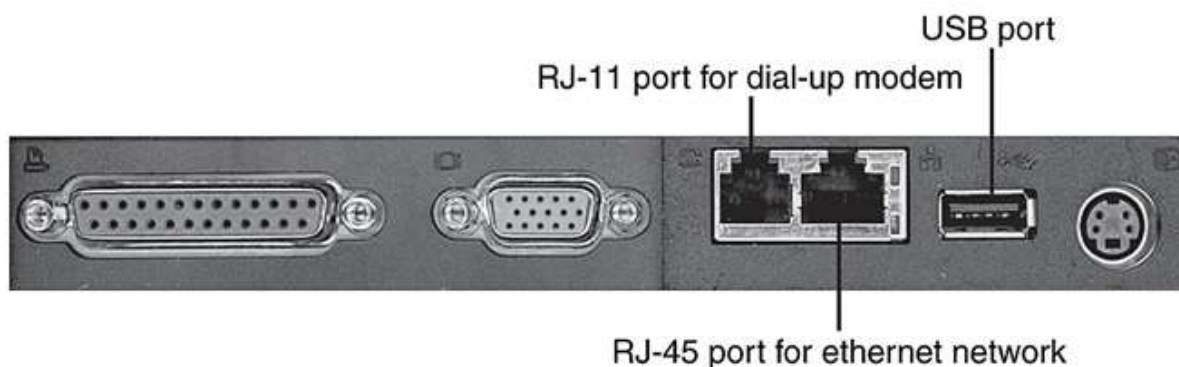
There are other options to move Folders to another computer such as a USB flash drive, however if there is a lot of material, that procedure can take a great deal of time.

Another option is to use a program such as "Hotbox" or "File sharing" which is uploading and then downloading from the Internet. This procedure "eats" into your Internet allowance with your ISP.

The next option is to use an Ethernet crossover cable. This allows two computers to hook together and the Folders and files to go across quite quickly. All we need is to set up the system between the two computers and the correct cable. This is the most simplest, very secure, since the information does not leave your systems, and reasonably fast.

Let's get started.

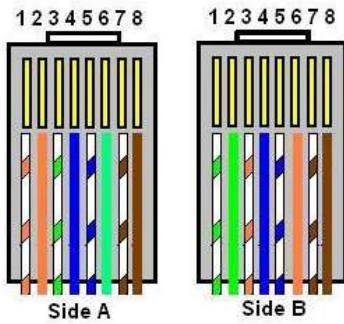
Crossover networking utilises the **RJ-45** ports on both computers in order to facilitate the communication. In case you haven't come across the RJ-45 port, it looks like the picture below. Note that it is slightly larger than the conventional telephone port (aka RJ-11 port). The RJ-45 Port is where you place your Broadband cable.



There are two types of Ethernet cables.



The first one is the conventional Ethernet cable, which has the wiring placed in the same positions at either end. This is what you use for your Broadband connection.



The second type is the crossover cable, *which is what we need*. The end-points are slightly different compared to the above, in that four of the wires have been crossed at one end.

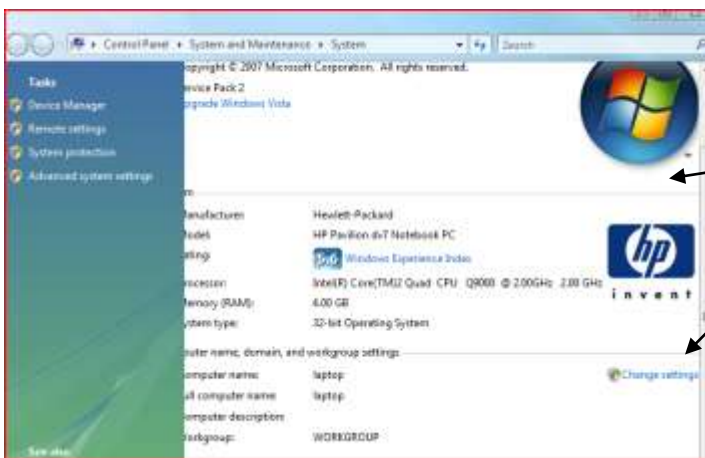
If you do not have a crossover cable handy, you can always make one on your own using the conventional Ethernet cable. Label one of the ends as "XOVER", while the other end as "STRGHTTHRU". Using the same crossover wire diagram as set out above you can easily fiddle around with the wires yourself and create a crossover cable for yourself in no time. Otherwise, if you want to purchase a crossover cable from a computer store instead, make sure the salesperson understands completely which type you need.

For the purpose of this exercise we are going to work with one computer called "laptop" which is a Vista O/S and the other computer called Peggy-PC. Which is a Windows7 O/S.

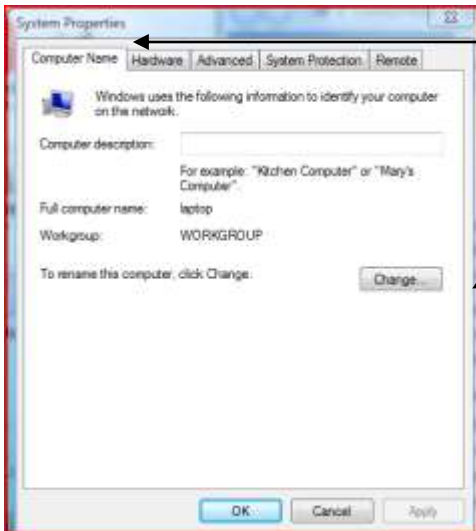
(details for XP O/S to Windows 7 is set out further down the page)

Connecting a Vista O/S and a Windows7 O/S. Start with the computer called "laptop"

First step.

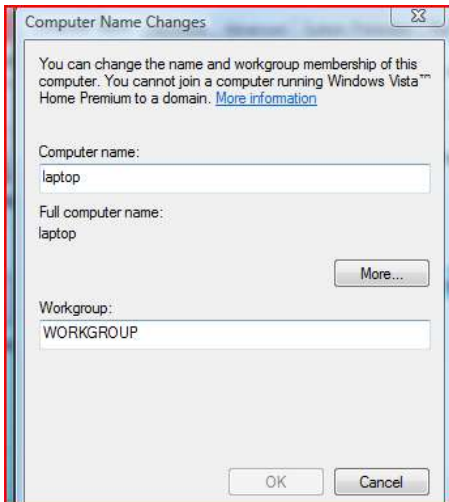


Go to Start
 Right click Computer/Properties
 You will see the window opposite.
 Click change settings.



Open the Tab Computer Name

Click change



Here the computer name may be changed. We will leave ours as laptop.

It is very important that all computers belong to the same workgroup. Give the workgroup a name.

I am leaving mine as Workgroup since most home computers already have that name.

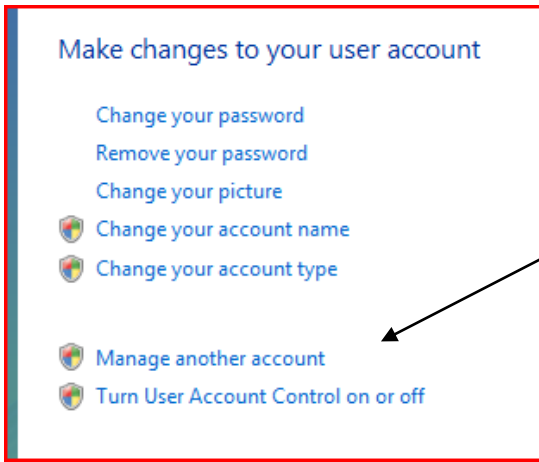
Close all windows.

Now go to the other computer Peggy-PC carry out the above checks, making sure the Workgroup has the same name as the first computer.

Reboot if asked.

2nd Step.

On both computers go to Control panel/User Accounts



Click on Manage another Account.

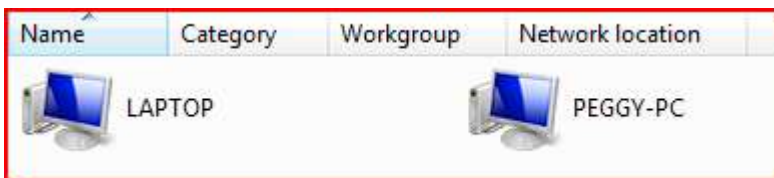
Set up an account for the other computer using the computer name. i.e. on the computer called "Peggy-PC" setup the user name as "laptop". And vice versa.

Third step:

Turn both computers off.

Place the Ethernet crossover cable into the appropriate slots on each computer. Reboot.

They will recognise each other.



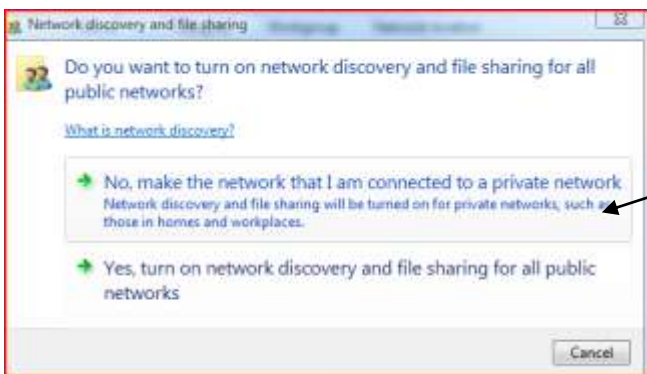
By clicking Network on one of the computers you should be able to see both computers on your screen. Depending on your security level you may have to turn on Network discovery – see next instruction.

We will set up the computers to share files /folders.

Go to Network on the computer "laptop".



Turn on Network discovery by clicking "Click to change"



In the next box choose Private network.

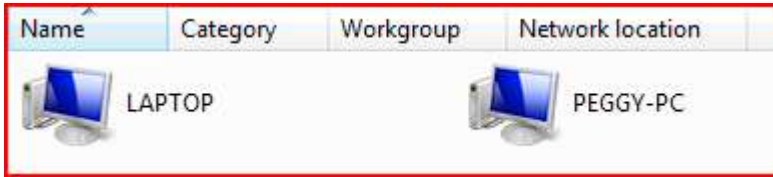


Also turn on File sharing plus printer sharing if you envisage wishing to share a printer on this system.

Just click the arrow and click "On".

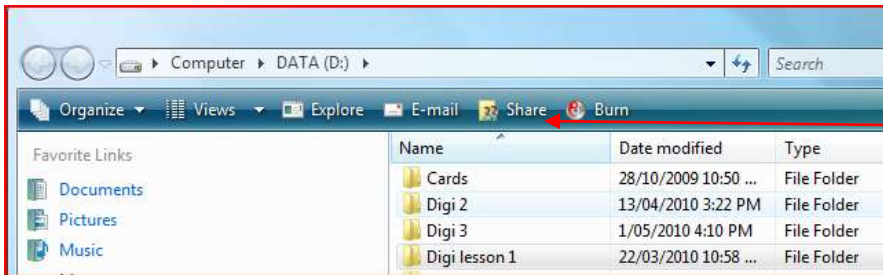
Repeat the procedure for the other computer.

Fourth Step:

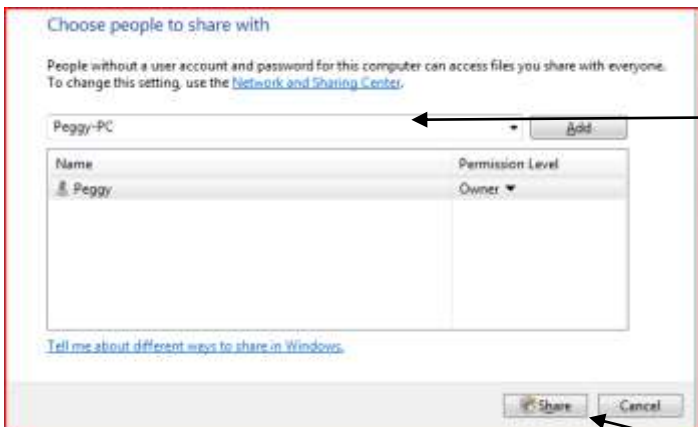


To share a file between the two computers: We will transfer from "laptop" to Peggy-PC

Find the folder you wish to share



Click on the folder. In the toolbar you will now see an icon Share. Click on it.

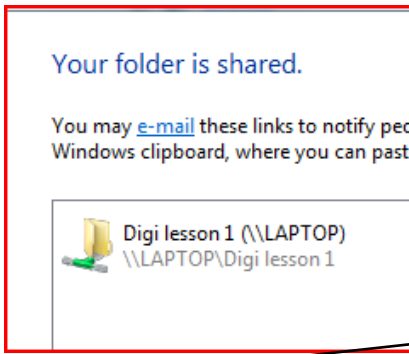


The first time you use this system it will be necessary to add the other computer to the "share list"

Type the name Peggy-PC in the box and click Add.

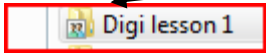
From now on you will be able to Click on the drop down arrow and select Peggy-PC. What we are doing here is only allowing that computer to share our folder. No other computer will have access. This is a security measure.

Click share.



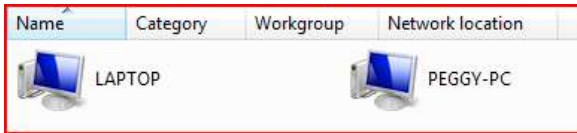
A message will appear showing that the folder concerned can now be shared.

The folder itself will have an icon attached to it to show that it has been shared.



Fifth Step:

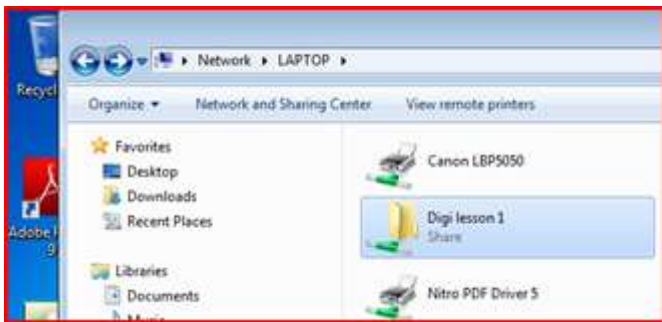
Now we will go into Peggy-PC computer and transfer the file over. This is the W7 computer



Go to Start/Peggy (you will have your name there)

Click on network at the bottom of the page. Double click on "laptop".

This will open the computer "laptop"; you will be able to see the shared folders.



You can either just open it or drag the folder to another location for safe keeping and further use.

That's all there is too it.

Now we will look at XP and Windows 7

Both computers must belong to the same Workgroup. Follow the procedure in Step 1, above.

Connect your computers together using a crossover cable, go to the adapter settings; and right click the "Local Area Connection" connect to your and choose Properties.

In XP you will find this by going to: Start/My Network Places/View network connections

Right click on Network Connections/Click Properties

Scroll down - find Internet Protocols – Select it and click Properties.

To find the Internet Protocol in Windows 7:

Right Click on Network/Properties/Change Adapter Settings.

Right Click local Area Connection/click Properties **Make a note of the Settings you will need these later.**

Follow these instructions for both computers.

Look for "Internet Protocol version (TCP/IPv4)" and double click it.

Give it an ip address, subnetmask, and default gateway. **Make sure that the default gateway is the IP address of the 2nd computer.**

Once done, go to the 2nd PC and do the same thing.

For example, (These are the figures I used)

1st PC:

IP: **192.168.0.1**

Subnetmask: 255.255.255.0

Default Gateway: **192.168.0.2**

2nd PC:

IP: **192.168.0.2**

Subnetmask: 255.255.255.0

Default Gateway: **192.168.0.1**

Restart both computers.

You should now be able to go to Network places on both computers and see the two computers.

In both computers you can make a folder in Network Places for Sharing. Everything you wish to move can go to that folder.

So if you are moving stuff from XP to Windows 7, make a Data folder, a Music Folder and a Pictures folder in XP.

It is possible to drag and drop your "stuff" into these folders. (In XP Right click on the folder and allow sharing)

Go to Windows 7, Make similar folders. (In Windows 7, Click on the Folder then click share)

You should now be able to log on to both computers and get the Folders you have just made across to Windows 7.

When you have finished moving your "stuff" it will be necessary to change your Windows 7 Internet settings back to their original state, if you are on Broadband. They were most likely IP address – Automatically, and DNS – automatically. However if they were different then you will have that noted from earlier in the instructions. Windows is very touchy about this and most likely will not work unless you reverse back to the original settings.

Prepared by Peggy 2010