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Vista networking

Find out what changes you might need to make when adding Vista to your network

Having resisted for some time the urge to start investigating Vista, I've recently added a couple of Vista PCs to my network. It wasn't particularly difficult, but there are a few changes to the networking options that could catch you out – especially if, like me, you're looking to connect a Vista PC to a network that contains a mix of earlier Windows and Linux systems.

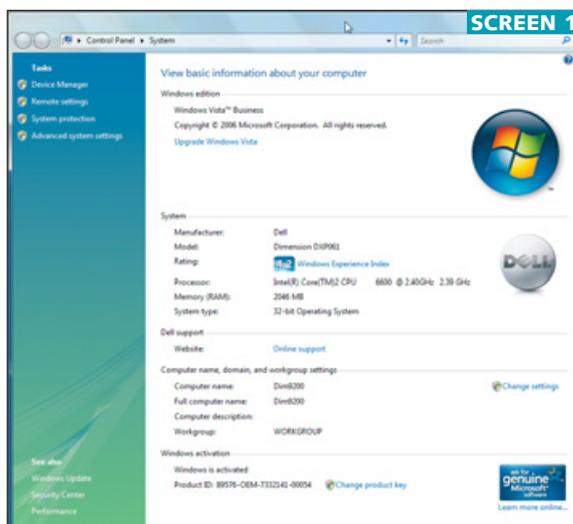
A different workgroup

If you're an XP Home user, one of the first things that could trip you up is the dropping of MSHOME as a default workgroup name. Instead, WORKGROUP (the default in XP Professional) is now used on all Windows Vista implementations.

It's not a huge issue, as computers don't have to be in the same workgroup to share files and printers – it's just a lot easier if they are. And it's not that hard to change although, if you're new to Vista, finding out how to go about it can take a while.

The easiest way is to go to the desktop Start menu, right-click on the Computer option and select Properties from the pop-up menu. A window will open containing basic information about your computer setup with, at the top, the version of Windows Vista being run. In my examples I've used Windows Vista Business, but if you're using another version the same basic networking options covered here should all be available.

When you've got to the window shown in screen 1, you'll see the current computer name, domain and workgroup settings, with a Change Settings option alongside. Click this and (once you've okayed it with Vista security) a familiar System Properties window will appear, from which you can change the computer name and workgroup, just as on Windows XP.



What you type in here is up to you. If all your other PCs are set to use the MSHOME workgroup, you'll probably want to stick with that rather than change them all to use WORKGROUP. However, I prefer to use a name of my own devising rather than the defaults used by Microsoft, and would recommend you do the same.

Browsing the network

You'll see another big difference when you try to browse the network from a Vista PC. As you can see in screen 2, where I've gone back to the Start menu and clicked on the Network entry to browse the Lan, I'm told that Network discovery is turned off so I can't see any network computers or devices.

Again, this is easy to change. Click on the error message and take the option to turn on network discovery. Alternatively, from the Start menu, right-click Network and select Properties from the pop-up menu to get to the Network and Sharing Center (see screen 3). There you can change not only the Network discovery setting but other networking options too.

Above: Vista PCs start out as members of a workgroup called WORKGROUP, as with XP Pro

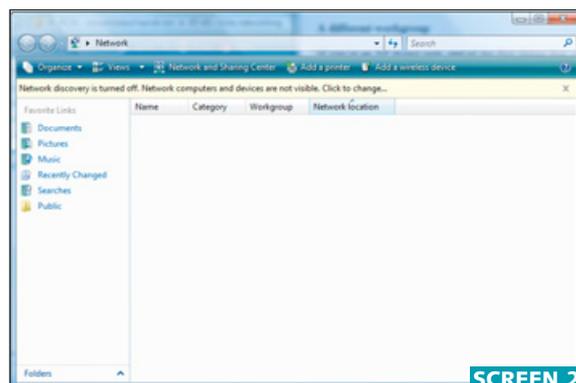
Below: When you first try to browse the network from a Vista PC, you'll be told network discovery option is turned off

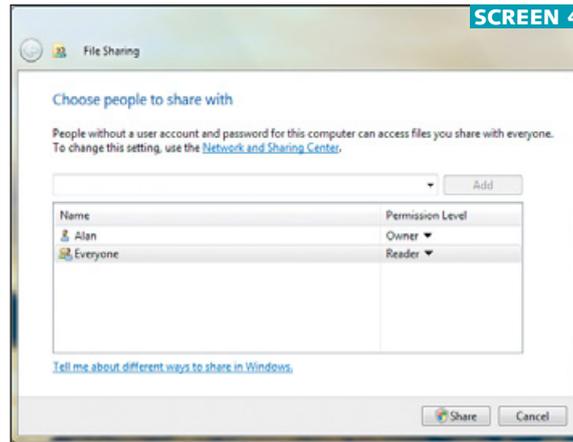
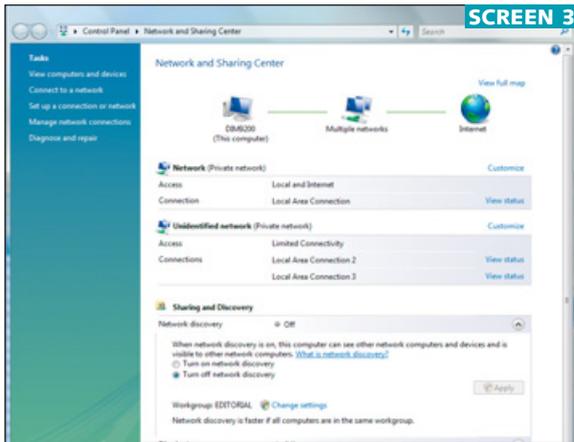
When you first turn on Network discovery, you'll be asked whether to do this for all public networks or to make the network you're connected to private. The private option is the one to go for if you're connected to either a home or workplace Lan. If you choose the wrong setting you can change the type of network later, also from the Network and Sharing Center.

Once Network discovery has been enabled, you should be able to browse the network in much the same way as on a Windows XP PC, and you'll be able to map network drives, set shortcuts and so on. The Windows firewall will have been automatically updated to allow the necessary protocols through, and browsing should be a lot faster on an all-Vista network than with XP and previous versions of Windows. On a mixed network, however, it can take a while for Windows to work out exactly what's out there.

Not so simple sharing

At this point you'll probably find that file sharing is also turned off. This won't stop you browsing the network or opening files on other PCs or servers, but it will stop others from connecting to your Vista PC and browsing or opening folders and files on its hard disk. It's easy to turn file





Left: If you have turned off password-protected sharing, you'll need to set the permissions on shared folders to allow either the Guest account or the Everyone group access

sharing on via the Network and Sharing Center, but you may need to do more than just enable this option, especially if any of the existing PCs on the Lan are using simple file sharing.

The only option in Windows XP Home, and optional in XP Professional, simple file sharing is designed to make it easy to build a file-sharing network. It authenticates remote users as though they were logged on using the built-in Guest account, regardless of what name or password they use on their local PC. This means you don't have to do very much to give other users access to file shares, although it is lacking in terms of granularity. That is, you can't give some users access to file shares but not others.

In Vista, however, you won't find any reference to simple file sharing. The default is to use password-protected sharing, where remote users are authenticated using the same username and password they entered when logging on to their local PC. If there's a matching account on the remote Vista PC then access will be granted, otherwise the user is asked to provide a suitable set of credentials before being allowed in.

Unfortunately, problems can arise if you try to deploy password-protected and simple file sharing together. I recommend using one or the other and favour password-protected sharing, but if you want to use simple file sharing Vista can be configured to suit. Turn off password-protected sharing in the Network and Sharing Center. Next, you'll need to change the access permissions on any folder or file you want to share to give access to either the Guest user or the Everyone group (see screen 4), the only exception being where you want to share files using the Vista public folder.

Another new option in Vista, public folder sharing lets you share files

Above: You can enable/disable network discovery and other networking options from the Vista Network and Sharing Center

without having to explicitly configure file shares. There's always a public folder on a Vista PC, accessible to any user on the computer or anyone connecting to the PC on the network.

Public folder sharing is normally disabled to start with, except for users sharing the local PC. It's enabled from the Network and Sharing Center with two options: to only allow read access or to enable users to edit existing files and add new ones of their own.

The same rules on network file sharing apply, so if you've enabled password-protected sharing, remote users will need to be logged on with a suitable name and password to gain

access to the public folder. Disable password-protected sharing and anyone can get into the public folder.

The public folder in Vista is a quick and easy way to share documents, with a number of sub-folders already configured in it – documents, downloads, music, pictures and videos. Just copy a file into one of these and it's available for shared access without having to grant permission to any other folder on your hard disk. However, it's an all-or-nothing tool with no facilities to fine tune access rights to sub-folders. If that's what you're after, then stick with the conventional file-sharing options. **PCW**

Vista and Samba

Commonly used to drive Network-Attached Storage (Nas) appliances, Samba is a great little open-source application that allows Linux to share files using the same SMB/CIFS protocols used by Windows.

Vista users, however, may not be able to connect to shares on some Samba-powered Nas appliances (and Linux-based servers) because of a change in the default authentication protocol used to negotiate access. That's because Vista uses the encrypted NTLMv2 protocol rather than NTLM or LM. Recent implementations of Samba (3.0.21 or later) know how to handle it, whereas earlier versions have no support for NTLMv2.

One solution is to upgrade to a later version of Samba. That's easy if you're running your own Linux server, but not on a lot of appliances, where the software may be embedded into silicon rather than loaded and

If you have problems accessing an old version of Samba from Vista, you'll need to change the local security policy

run from disk. In that case, you'll have to change Vista back to using the earlier authentication methods.

Here's what to do. From the Control Panel, choose Administrative Tools, then Local Security Policy. Next, open the Local Policies folder, click Security Options and then scroll down the list displayed until you find an entry marked Network Security: Lan Manager authentication level. Double-click this entry and change the setting from Send NTLMv2 response only to Send LM & NTLM – use NTLMv2 session security if negotiated.

