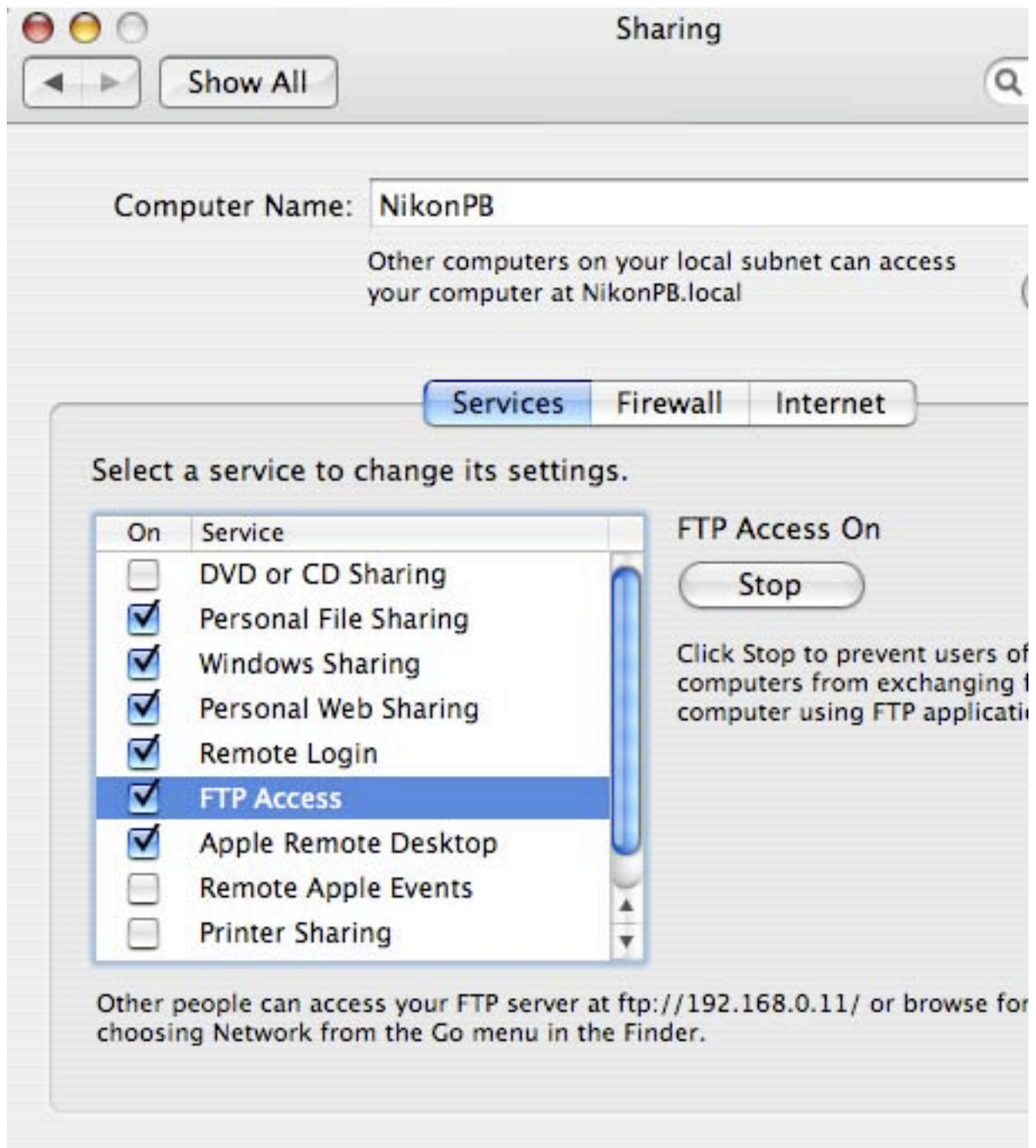


Make sure the FTP box is ticked.



When you have completed all the other setups in this outline, come back to the sharing panel and just check the line at the bottom and ensure that the address is ftp://192.168.1.3 (or whatever you decided the ftp server address is) this

address should be the FTP settings address you use in the WT-4 Setup Utility

THE MODEM SETUP

I have a wireless network at home and I knew that at various times I would need to be able to switch wireless connections between the home or dedicated Nikon network. As my home was on the 192.168.0.1 subnet I chose to use 192.168.1.1 for the Nikon network. I also decided to use fixed IPs for everything and so I began by connecting the Mac to the Netgear with an Ethernet cable and entering basic settings. I also chose to set-up for Ethernet and Wireless. I skipped the basic settings page (for ADSL connection) and let it blank but made the Netgear LAN side look like this:

LAN IP Setup

LAN TCP/IP Setup

IP Address . . .

IP Subnet Mask . . .

RIP Direction

RIP Version

Access Router Management Interface on additional port
(NAT-disabled mode only)

Use Router as DHCP Server

Starting IP Address . . .

Ending IP Address . . .

Address Reservation

	#	IP Address	Device Name	MAC Address
<input checked="" type="radio"/>	1	192.168.1.2	PBEther	00:03:93:DB:BB:2A
<input type="radio"/>	2	192.168.1.3	PBWire	00:30:65:26:1B:31
<input type="radio"/>	3	192.168.1.4	D200	00:90:B5:91:9A:7B

(#3 is D200 but it could be Camera, WT4 or anything - your choice)

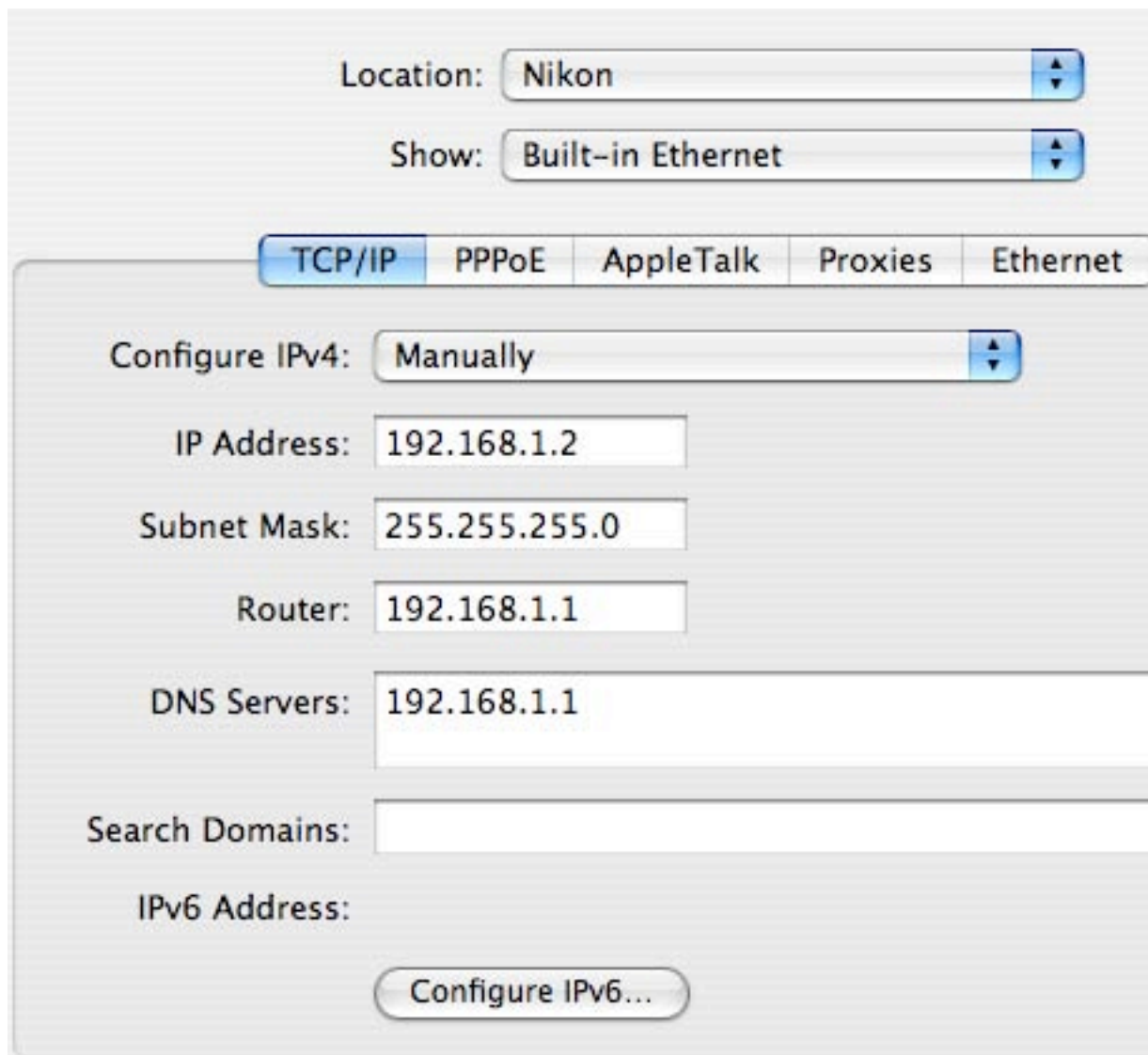
Once you hit the Apply button you'll lose connection with the router/modem at this stage so don't forget to change the address in your browser bar from 192.168.0.1 to 192.168.1.1 to

get back to the modem/router.

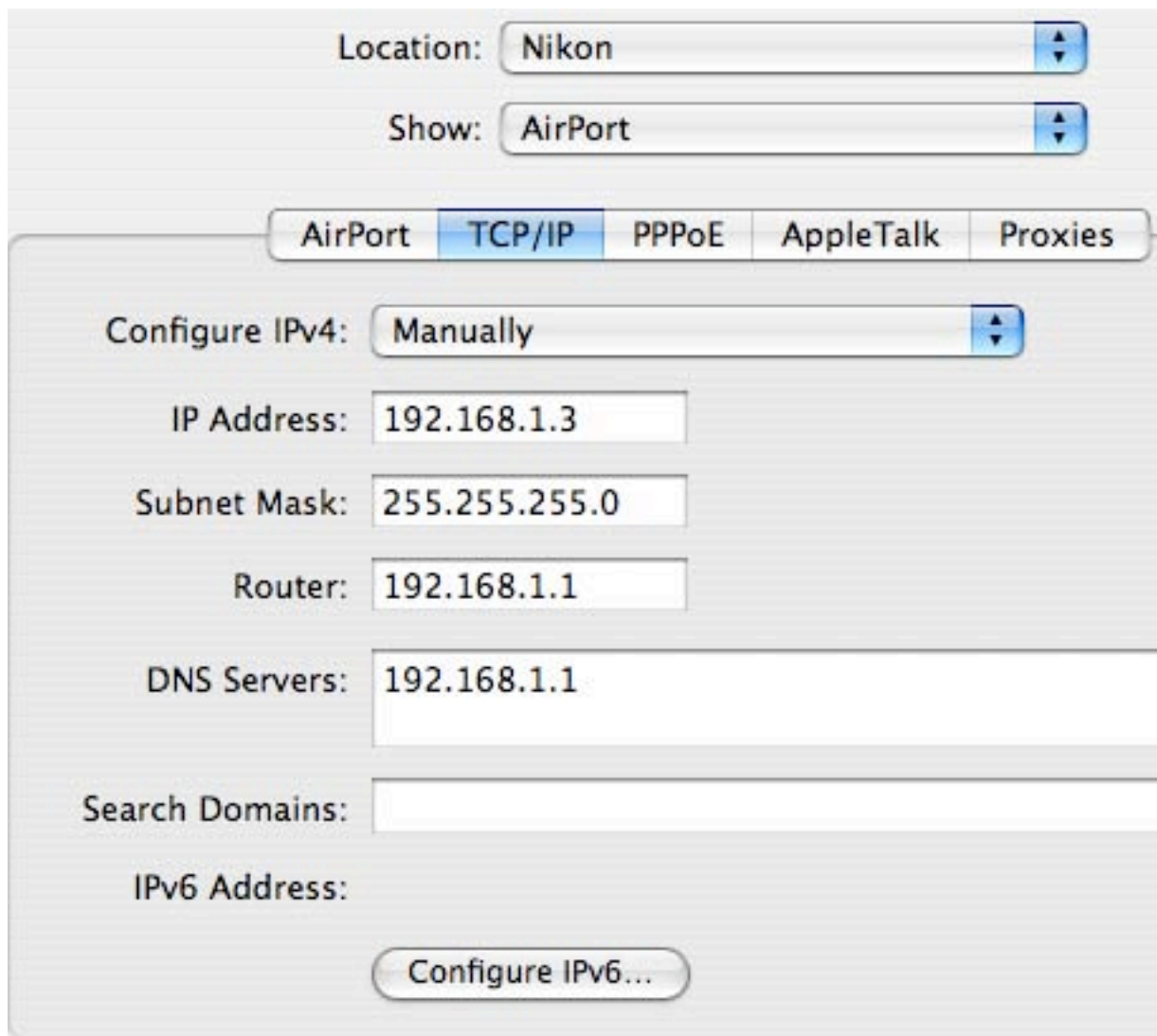
As you can see, I used fixed IPs on the Mac and the camera and then reserved these addresses with the appropriate MAC address numbers. Check the paperwork that came with your WT-4 for the unique MAC Address. Otherwise just go into the wireless settings on your camera and, with the WT-4 connected, check the MAC address.

With the modem set you are now able to add a location to the PowerBook network settings using the fixed IP set above. I decided to create a new location called Nikon for both Ethernet and AirPort so that I could quickly flip backwards and forwards between the Automatic setting for home or hotel and my private Nikon network.

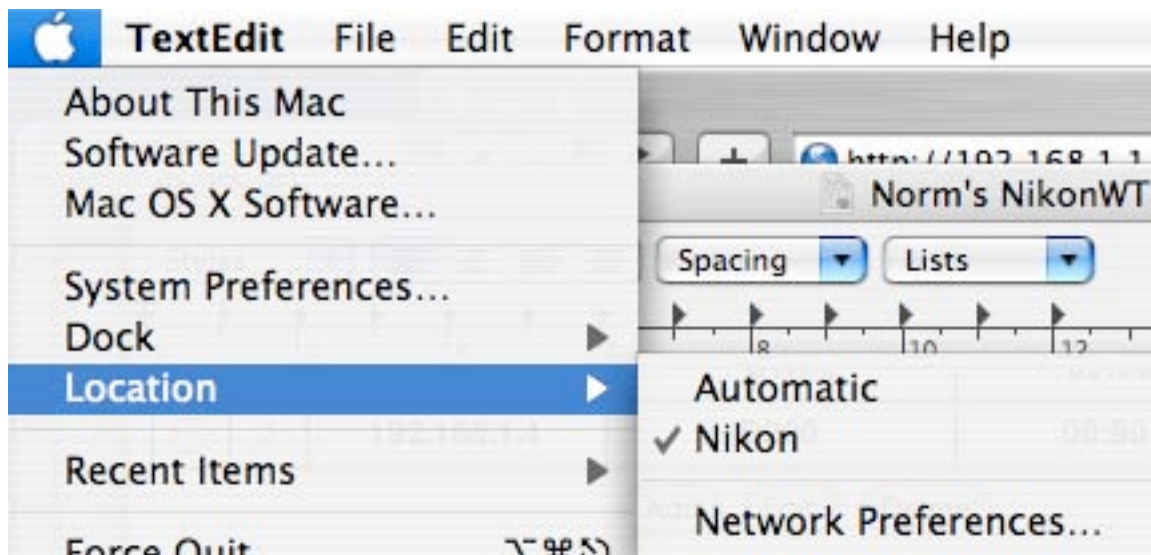
I configured the ethernet network port like this:



I configured the AirPort network port like this:



With the Ethernet configured to 192.168.1.2 and the AirPort to 192.168.1.3 I was ready to reconnect to the Netgear by switching the Location to Nikon to complete the settings.



The WT-4 needs ports forwarding in the router. Back in the Netgear, go to to the Services menu and add two new services ... the Nikon manual says Ports 15740 TCP and 5353 UDP need to be open along with the normal FTP ports (21 & 22 already configured in the Netgear Firewall as an option). Create the new services by using the add custom services button like this:

Add Services

Service Definition

Name:	<input type="text" value="Nikon1"/>
Type:	<input type="text" value="TCP"/>
Start Port:	<input type="text" value="15740"/>
Finish Port:	<input type="text" value="15740"/>

Repeat for Port 5353 UDP and then click the

Apply button at the bottom of the page. Double check the port numbers and that you have assigned UDP and TCP to the correct ports. Now go to the Firewall Rules menu to add your new services - and remember to add the ready-made FTP service so that your firewall settings window looks like this:

Firewall Rules

Outbound Services

	#	Enable	Service Name	Action	LAN Users	WAN
	Default	Yes	Any	ALLOW always	Any	A

Add

Edit

Move

Delete

Inbound Services

	#	Enable	Service Name	Action	LAN Server IP address	WA
<input type="radio"/>	1	<input checked="" type="checkbox"/>	Nikon2	ALLOW always	192.168.1.2	
<input type="radio"/>	2	<input checked="" type="checkbox"/>	Nikon1	ALLOW always	192.168.1.2	
<input type="radio"/>	3	<input checked="" type="checkbox"/>	FTP	ALLOW always	192.168.1.2	
	Default	Yes	Any	BLOCK always	Any	

Add

Edit

Move

Delete

Apply

Cancel

Before leaving the Netgear setup, click on the wireless settings menu and enter the information required. Remember to set Channel: to 1 because the WT-4 is fixed on channel 1

Name your SSID, this is the identifying name that is broadcast by the Netgear and will appear as one of the available networks in your Airport menu on the PowerBook.

Wireless Settings

Wireless Network

Name (SSID):

NWLNikon

Region:

Europe

Channel:

01

Mode:

g & b

Wireless Access Point

- Enable Wireless Access Point
- Allow Broadcast of Name (SSID)
- Wireless Isolation

Wireless Station Access List

Setup Access List

Security Options

- Disable
 - WEP (Wired Equivalent Privacy)
 - WPA-PSK (Wi-Fi Protected Access Pre-Shared Key)
 - WPA2-PSK(Wi-Fi Protected Access 2 with Pre-Shared Key)
 - WPA-PSK+WPA2-PSK
 - WPA-802.1x
 - WPA2-802.1x
 - WPA-802.1x+WPA2-802.1x
-

WEP Security Encryption

Authentication Type:

Automatic

Encryption Strength:

64 bit

WEP Key

Passphrase:

Generate

Key 1:

Key 2:

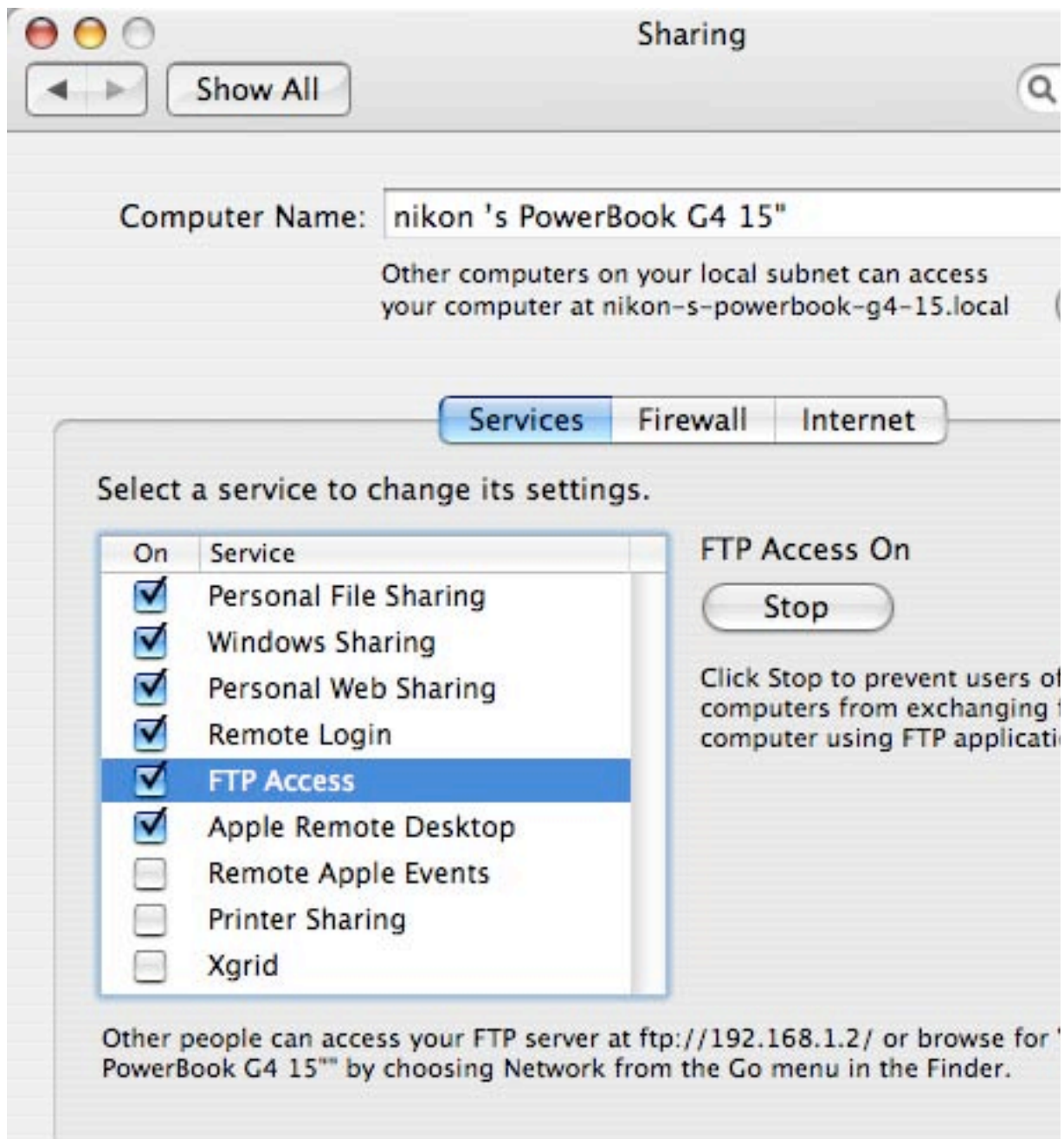
Once again, remember to click on the apply button at the bottom of the page.

That completes the settings required for the Netgear and it will now work as a router and the intelligent hub between your Nikon D300 with WT-4 and your Macintosh computer.

Now it's time to make the final settings on the Macintosh and D300. Before doing anything else, go to System Preferences and click on the sharing icon.



When the next window opens, make sure the FTP Access button is ticked like this:



And double check that the IP address at the bottom is what you set for your ethernet connection.

If you have access to another Mac, it might be a good idea to test your system at this stage so that you are confident that the basic settings are

all working. On your second Mac, either temporarily setup a manual network setting so that you can connect to the Nikon Netgear wirelessly or, simply connect an ethernet cable from one the test Mac to the router.

Check you network settings to ensure you're on the right subnet i.e. 192.168.1.?? and then, in the finder window go to the Go menu and slide down to Connect to Server. When the new window opens, type ftp://192.168.1.2 into the window and click on the Connect button.



If everything's working, you should see this window open:



From this window you can see that the FTP access is working, the ports on the firewall are open and your Mac and Netgear router are working as they should.

Enter your user name, that's the user name of your Mac dedicated to the Nikon and your password and the drive on your Mac will open in the user folder.

If you want a belt and braces check on the system, try the same process but this time entering your AirPort address of 192.168.1.3 and exactly the same windows should open.

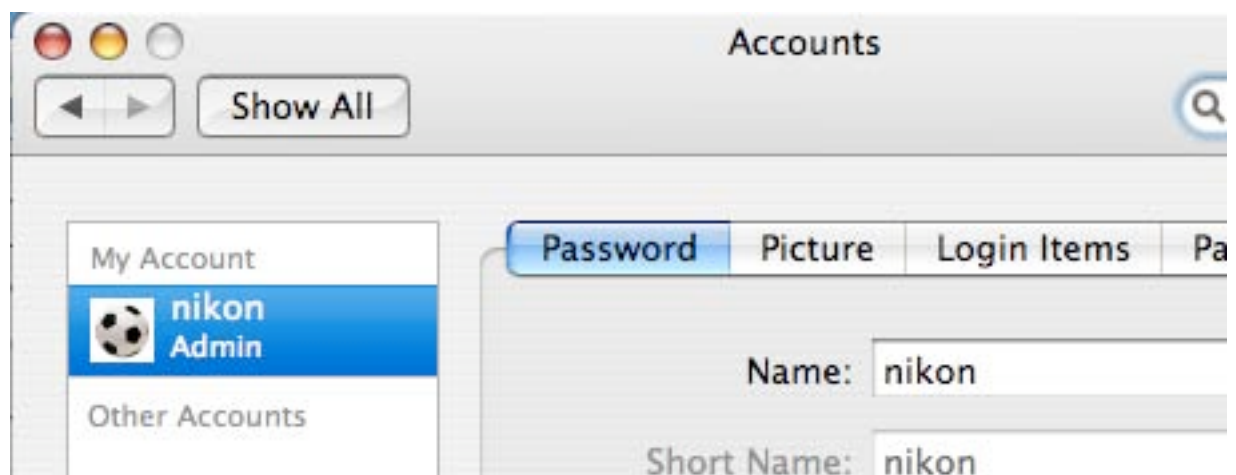
You now have access to your Mac, via the router,

and FTP is working. That's the easy bit!

CONNECTING TO THE WT-4

Before starting the connection process, create a new folder on the desktop of your Nikon Mac called D300.

Go to System Preferences and click on the Accounts icon to confirm your user name, mine's nikon i.e.



You will also need to know your password, if you didn't enter one when you first used your Mac, enter one now using the Change Password button.

It would be a good idea to write down a list of your known information at this point.

Macitnosh

Mac Name = nikon

Password = xxxxx

Ethernet address = 192.168.1.2

Wireless address = 192.168.1.3

Netgear

LAN address = 192.168.1.1

LAN DHCP = 192.168.1.2 to 192.168.1.225

Wireless SSID = NWLNikon

You are now ready to install your Nikon software. Install PictureProject and PictureProject Transfer that came with your camera and the WT4WirelessSetup software that came with the WT-4. If you have Capture NX, install that, too.

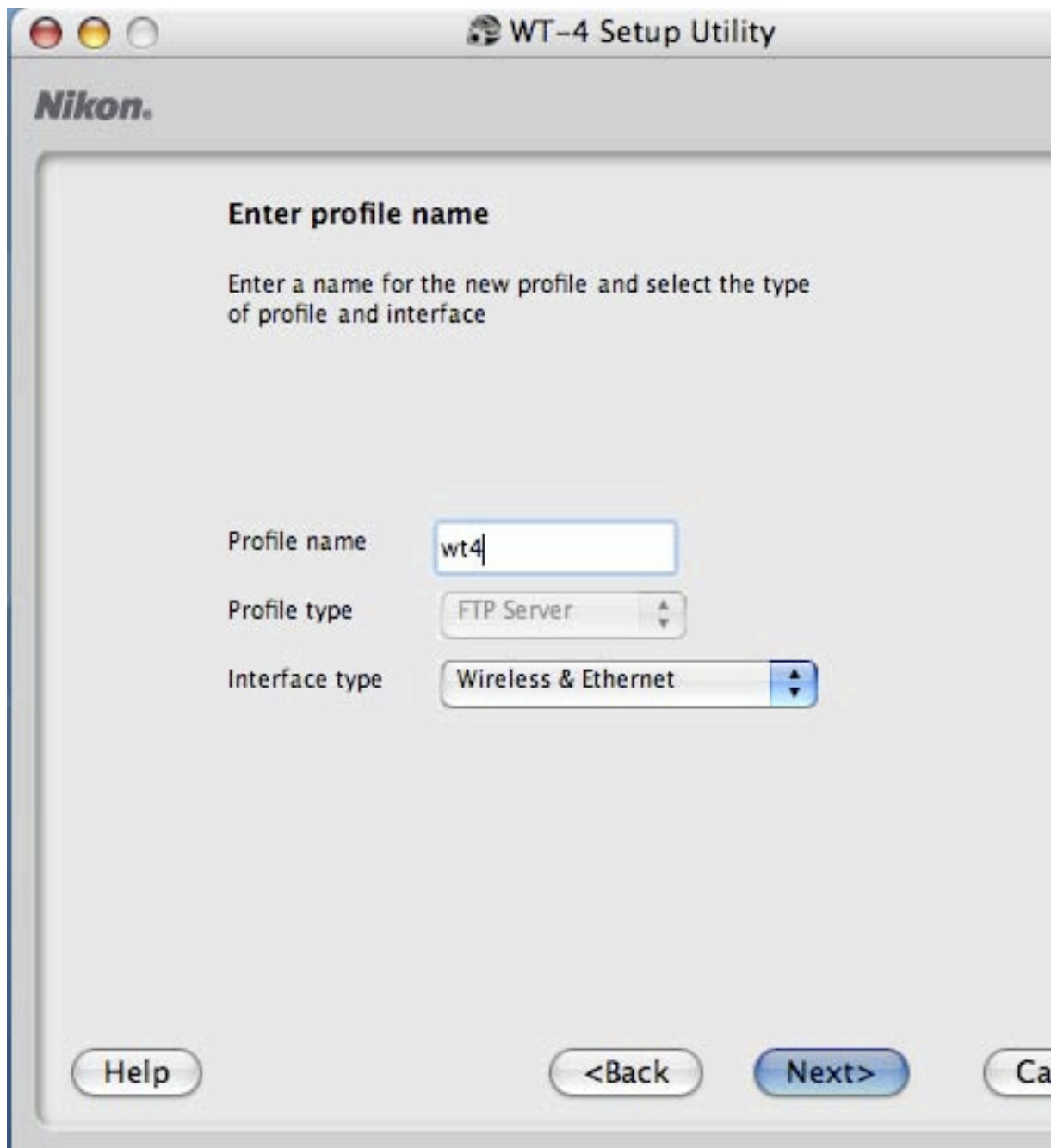
Connect the WT-4 to your D300 and then connect the USB cable from the Mac to the side of the D300. Now click to open the WT4WirelessSetup application. In my experience the icon will bounce in the dock for a minute or more. Long enough for you to believe it's frozen - and if it keeps bouncing for two or more minutes, it probably has. Use the Apple/Alt/Escape key to force quit and try again.

If the USB cable is connected and the camera is powered on, click the Next button and you will see this window:

Click to highlight 'Add new profile'



Switch on the camera and PictureProject Transfer will open and show you thumbnails of the available images on your camera. Now open the WT4WirelessSetup software and this window will open:



Click the Next button and when the next window opens, enter a Profile name (your free choice), select FTP, and leave the next option as Ethernet/Wireless

Enter profile name

Enter a name for the new profile and select the type of profile and interface

Profile name	<input type="text" value="NWL6"/>
Profile type	<input type="text" value="FTP Server"/>
Interface type	<input type="text" value="Ethernet & Wireless"/>

Click the next button, enter the SSID name as used in your Netgear (i.e. NWLNikon), leave the next button on Infrastructure, you can't change Channel 1, Leave option on Open System, Encryption set to WEP64, our password as set in the Netgear (i.e. 11110000aa) and leave the Key index set to 1

Wireless settings

Network name (SSID)	<input type="text" value="NWLNikon"/>
Network type	<input type="button" value="Infrastructure"/>
Channel	<input type="button" value="1"/>
Authentication	<input type="button" value="Open System"/>
Encryption	<input type="button" value="WEP64"/>
Encryption key	<input type="text" value="11110000aa"/> (10 characters)
Key index	<input type="button" value="1"/>

Click the Next button and un-check the Obtain IP address automatically option and in the IP address of your D300 reservation in the Netgear (i.e. 192.168.1.4), the subnet mask will be 255.255.255.0 and tick the Default gateway box and enter the base address of your Netgear (i.e. 192.168.1.1) and finally, leave the DNS server unchecked.

IP settings

Obtain IP address automatically

IP address

Subnet mask

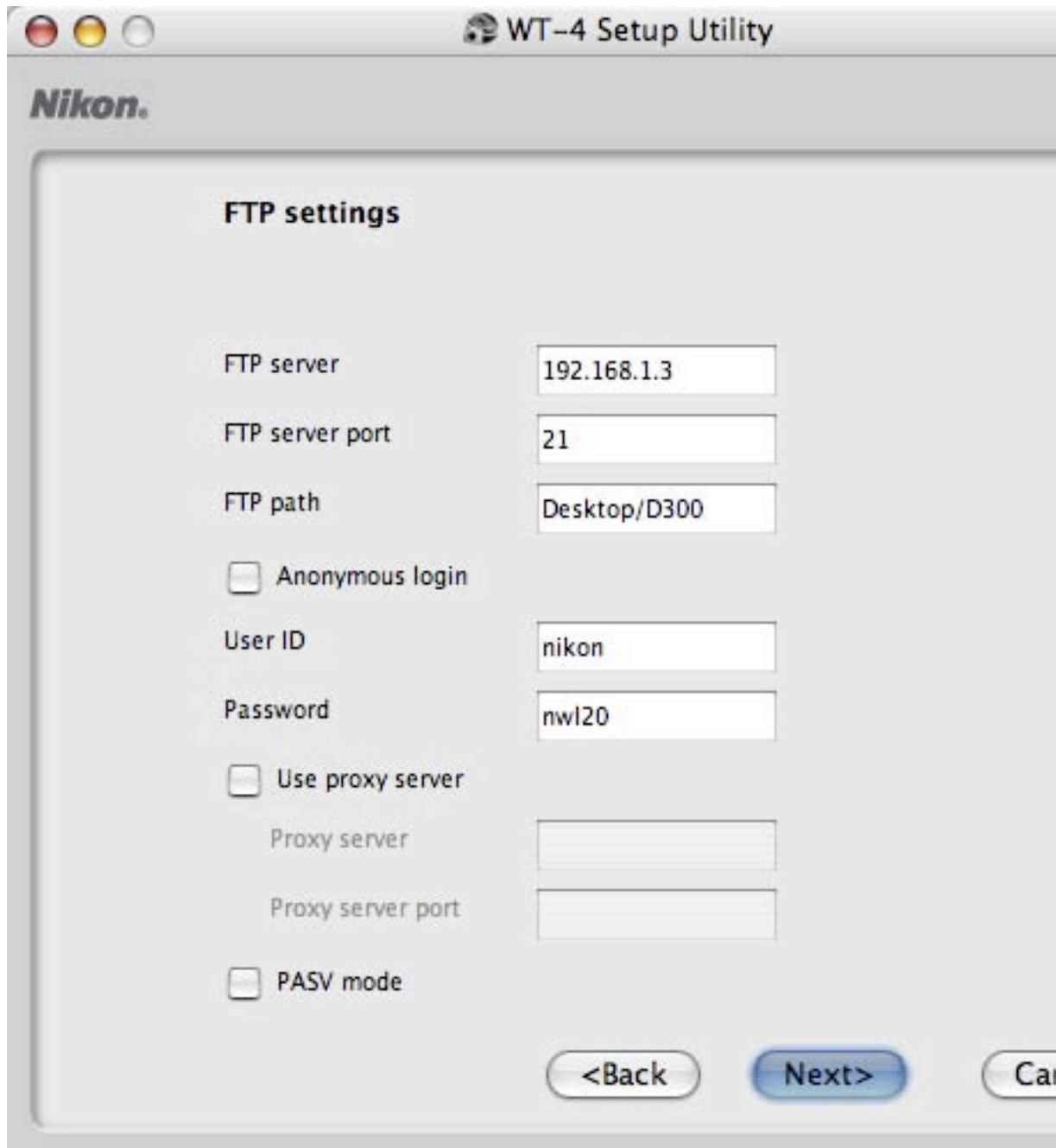
Default gateway

DNS Server

Click the Next button and when the next window opens, enter your Macintosh ethernet address (i.e. 192.168.1.2) as the FTP server address, enter 21 in the FTP server port, if you created a folder on the desktop of your Mac called D300, enter the path as: Desktop/D300

Note, there's no delimiter before the word Desktop and non needed after the folder name D300.

Leave the Use anonymous loginn box unchecked, enter Macintosh username and password and leave all other options blank as shown.



Click the Next button and when the next window appears, take time to check your data entry:

Profile information

Field	Value
Profile name	NWL6
Profile type	FTP Server
Interface type	Ethernet & Wireless
Wireless settings	
Network name (SSID)	NWLNikon
Network type	Infrastructure
Channel	1
Authentication	Open System

Click next and ensure that the message at the top of the next window confirms that the profile was saved to the camera.

At last, you are ready to test the wireless link. Switch the power off on the camera, remove the USB cable from the camera to the computer, insert the USB cable from the WT-4 into the side of the camera and then turn the camera on.

Go to the Set Up Menu on the D300 and scroll down to the Wireless option and select. If the Wireless LAN system is OFF, click the scroll wheel to the right to turn it on. Now, scroll down to Mode, click right and to Transfer mode and click right again and you should then see the name of your saved wireless profile. Click right to OK and you will see a message showing the D300 trying

to connect to the computer, if the profile name appears in Red the communication failed, if it is in Blue the communication was successful.

If the communication was successful, start taking pictures and in a few seconds (up to a couple of minutes) the images will begin to appear in the D300 folder on your desktop.

Before you set off - power down your modem, PowerBook and Nikon to make sure that you saved all your settings using the Apply button at the bottom of each page on the modem router.

You will need luck to get this all going first time and patience to check and double check all the various settings.

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