



# Configuring the 3Com® OfficeConnect® LAN Modem for Dial-in Access



## Connecting the ISDN OfficeConnect Lan Modem (OCLM)

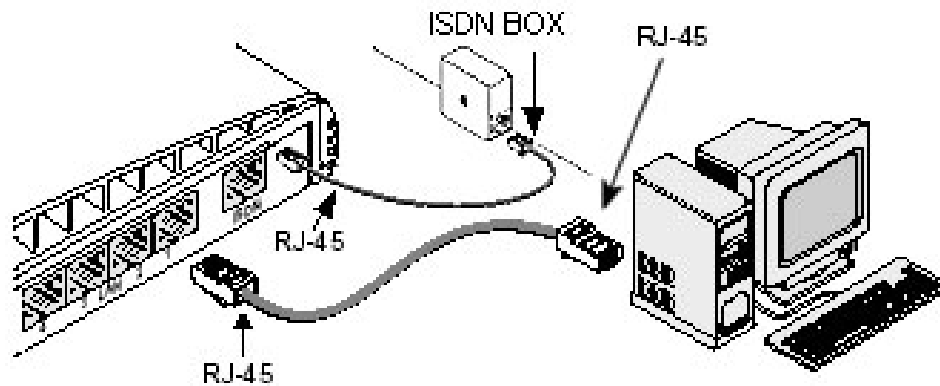


Figure 1

The diagram above (figure 1) shows the physical connection of the OCLM.

Connect an Ethernet Cable (straight) supplied in the box as a white cable between the RJ45 Network port of the Workstation and one of the four RJ45 Lan Ports of the OCLM.

Connect the ISDN Cable supplied in the box as a flat grey cable with RJ45 connectors between the ISDN port ( RJ45 ) and your Telephone providers ISDN socket ( RJ45 ).

Connect the Power Adaptor cable to the OCLM and the power adaptor to the Electricity mains supply and switch on.

The next step will configure the TCP/IP parameters of your workstation.

## Configuring The Workstation TCP/IP Parameters To Connect To The OfficeConnect LAN Modem (OCLM)

To configure the IP address of a Microsoft Windows 2000 Workstation choose Start, Settings, Control Panel. From Control Panel double click **Network and Dial-up Connections** as seen in figure 2 below

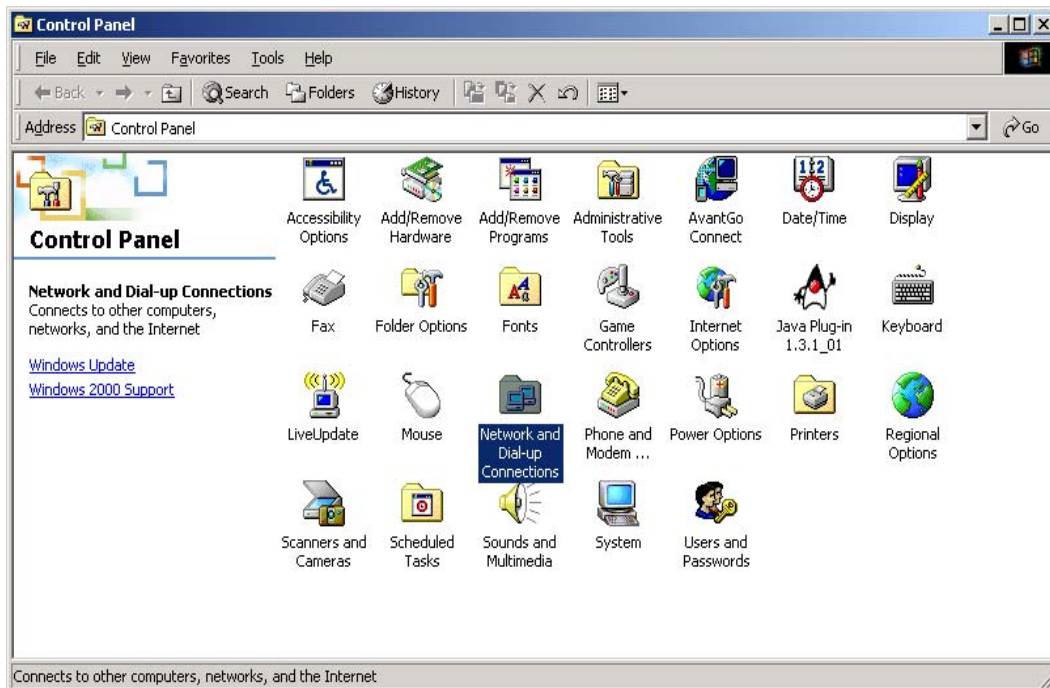


Figure 2

Right click the **Local Area Connection** icon and click on **properties** (figure 3)

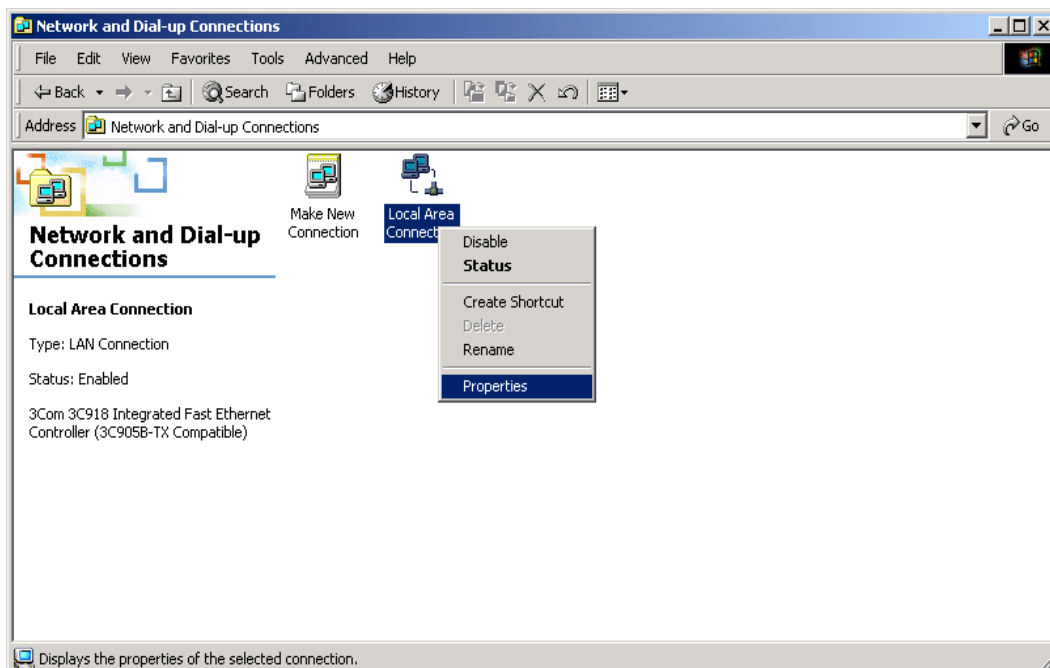


Figure 3

From the Local Area Connection Properties highlight **Internet Protocol (TCP/IP)**  
And choose **Properties** (see figure 4)

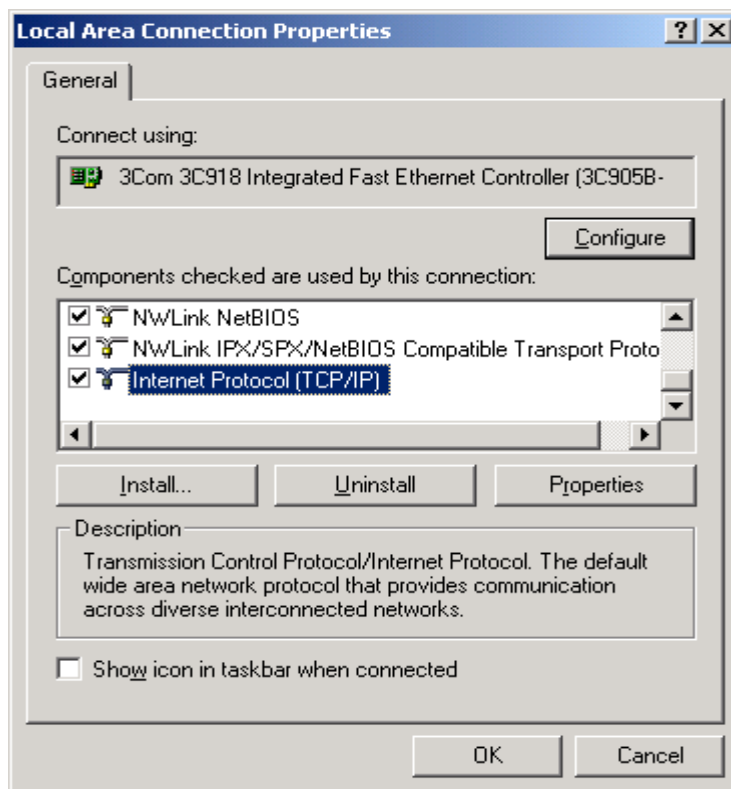


Figure 4

Select **Obtain an IP address automatically** and **Obtain DNS server address automatically** –click on **ok** and reboot your workstation. (see figure 5)

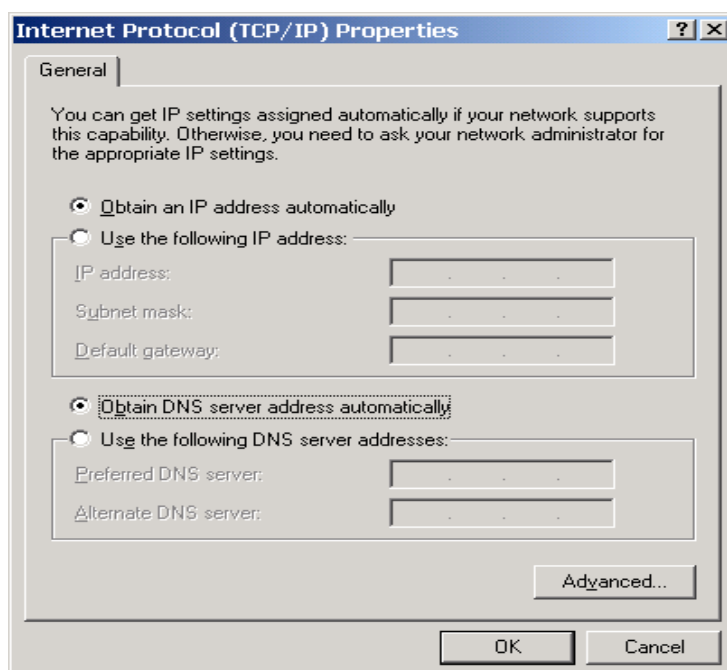


Figure 5

**Please note: If you have selected “Obtain an IP Address Automatically” you do not need to assign an IP address manually.**

## Manually Assigning an IP Address

### **To assign an IP address manually follow the steps below**

To enter an IP address manually you must assign an IP address within the same subnet (e.g. 192.168.1.2 to 192.168.1.30). When specifying an IP address the PC's default gateway should be the address of the OCLM and the ISP's DNS servers IP addresses should be entered in the DNS tab of the PC's TCP/IP properties as shown below. **Please note** the DNS entries below are examples only, you will need to contact your ISP to obtain the IP addresses of their DNS servers. (see figure 6)

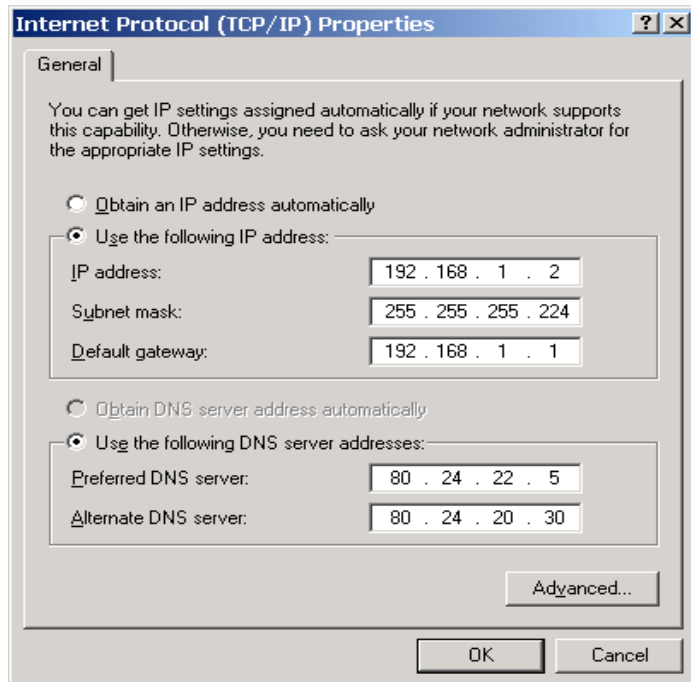


Figure 6

## Configuring The OCLM With The Web Browser

Open the Internet Browser and enter the IP address 192.168.1.1 and you will see the screen below :

Select the **“Click here to Continue”** line (see figure 7)

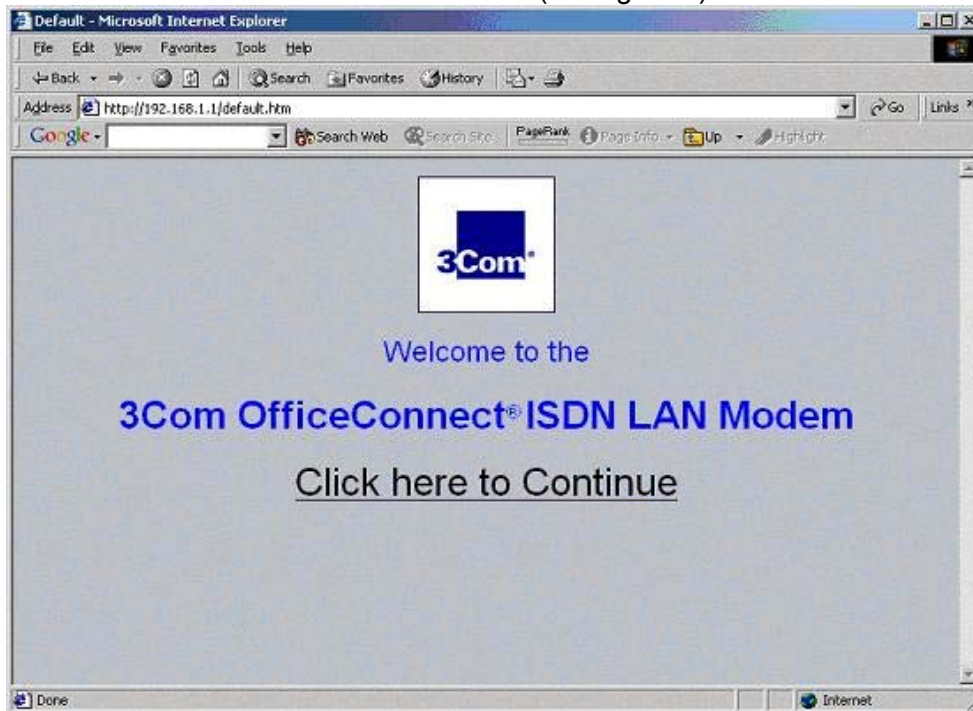


Figure 7

Enter your Password and reconfirm your Password in the Password (repeat) box, then click **“SUBMIT”** (see Figure 8)

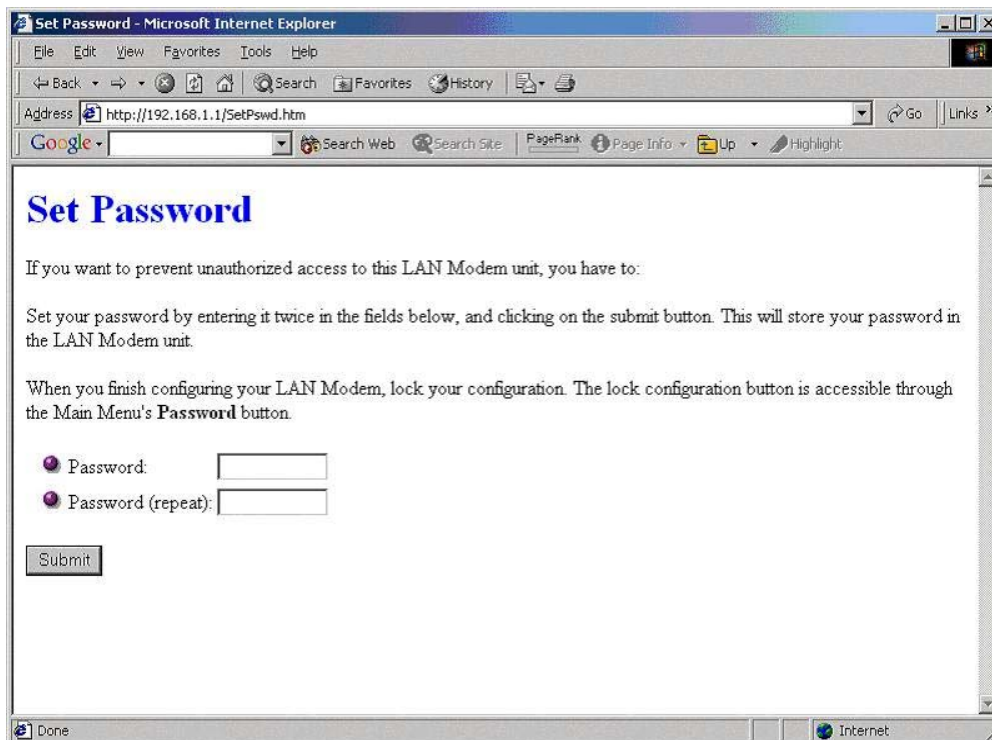


Figure 8

Please select your country from the list below, if your country is not in the list and you are in Europe, please select “**Euro-ISDN (ISDN2e)**”, see figure 9

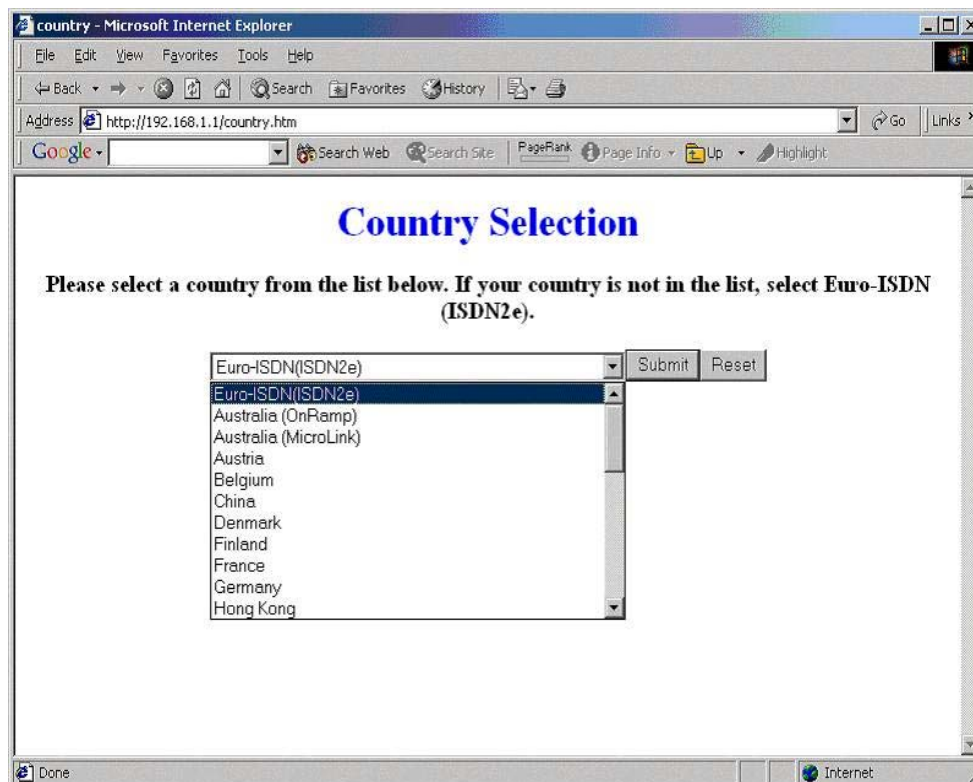


Figure 9

Enter your own telephone numbers assigned to your ISDN line as either two separate numbers or if you have one number enter this in both boxes (These telephone numbers should be given to you by your Telephone Company) (see figure 10)

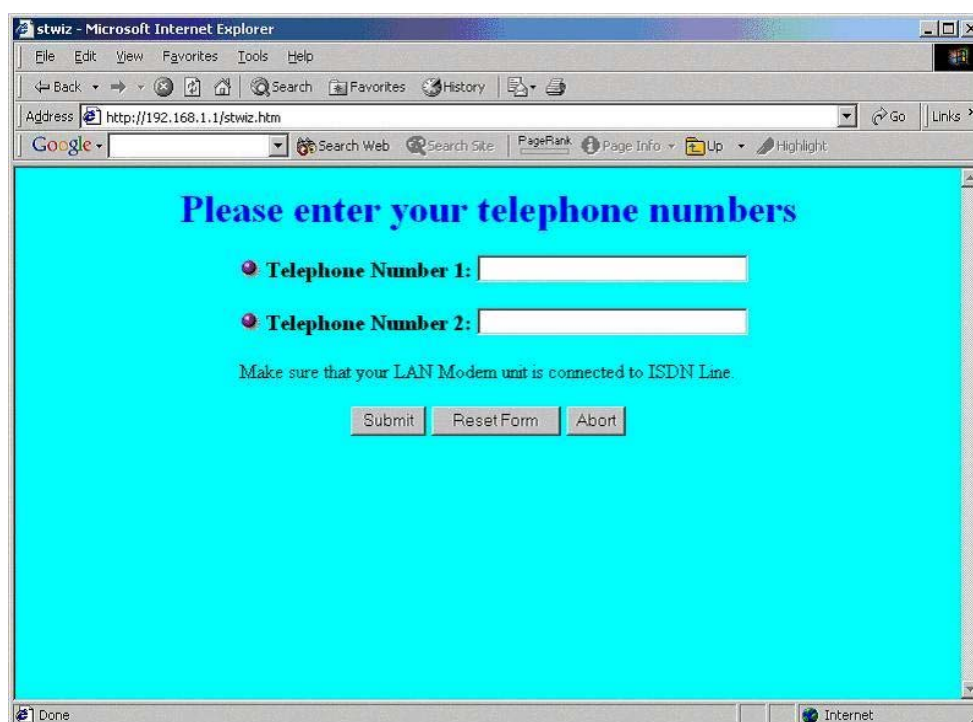


Figure 10

## Configuring A Dial In User Profile To Allow A Remote User To Dial Into The OCLM

The OCLM home page will now be displayed (see figure 11 below)

To set up access for a **Dial in User**, a Dial in Profile will first need to be created. This is done by clicking on “**Dial In**” from the left hand menu.

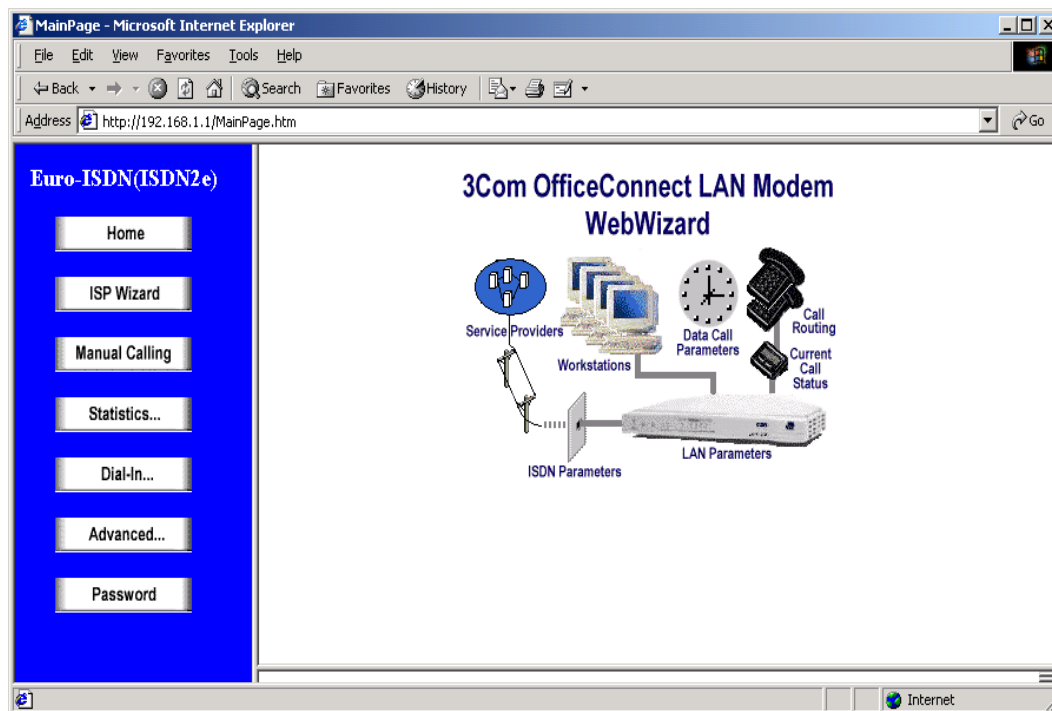


Figure 11

Choose “**New Dial-in User**” and click select as shown in figure 12 below

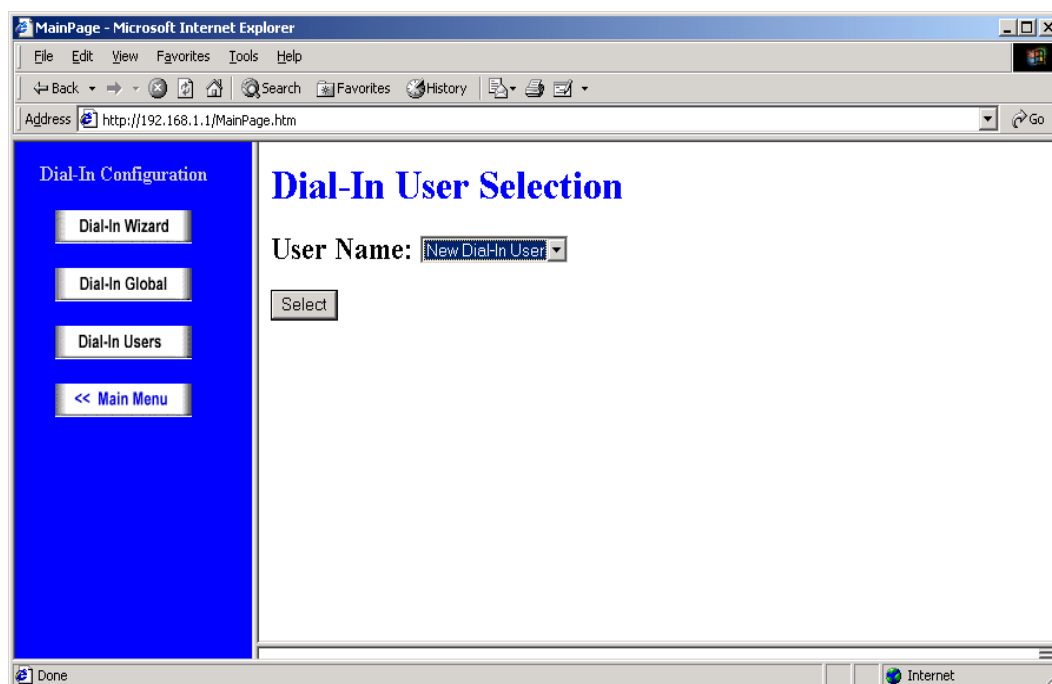


Figure 12



## Dial In User Parameters

On the **Dial In** parameters screen enter the details as mentioned below (see figure 13).

**Name:** Enter the name of the dial in user account

**Password:** Enter a password for the dial in user account

**Type Of Use:** From the pull down menu select **Single user dial in**

**Idle Timer:** Leave the Idle Timer as 900 seconds (set by default)

**ISP Selection :** If there is a previously configured Internet Service Provider (see the FAQ How do I configure the OCLM for Internet Access), then select the name of the service provider in the ISP Selection list.

**Data Compression:** Leave the Data Compression box unchecked until the configuration has been tested.

### Callback Parameters (see figure 13)

**Enable Callback:** If the OCLM will be used to callback the user, place a check in the enable Callback field.

**Callback Telephone Number:** Enter the telephone number of where the OCLM will callback the user in the Callback Telephone Number field.

**Callback Multilink Number:** If the ISDN line has a multilink number enter the ISDN multilink number here.

**Callback Authentication:** Place a check in the Callback Authentication box.

**Callback Username:** Enter a username for the callback authentication.

**Callback Password:** Enter a password for the callback authentication.

**B Channel Rate:** Select the ISDN data rate relevant to your country. (If you are not sure please call your telephone service provider)

**Callback Delay:** Leave the default as 5 seconds for the callback delay.

The screenshot shows a web browser window titled 'MainPage - Microsoft Internet Explorer' with the address 'http://192.168.1.1/MainPage.htm'. The page is titled 'Dial-In Configuration' and 'Dial-In User Parameters'. On the left is a blue sidebar with buttons: 'Dial-In Wizard', 'Dial-In Global', 'Dial-In Users', and '<< Main Menu'. The main content area contains two sections: 'Dial-In User Parameters' and 'Callback Parameters'. The 'Dial-In User Parameters' section includes fields for Name (test), Password (password), Type of Use (Single user dial-in), Idle Timer (900 seconds), ISP Selection (None), and Data Compression (unchecked). The 'Callback Parameters' section includes: Enable Callback (checked), Callback Telephone Number (0123456), Callback Multilink Number (0123456), Callback Authentication (checked), Callback Username (dialin), Callback Password (password), B Channel Rate (64Kb/s selected), and Callback Delay (5 seconds).

Figure 13

## Configuring Caller ID Authentication Parameters (CLID)

If the OCLM is used with CLID to authenticate a user please go through the following steps (see figure 14) :

**Enable CLID Authentication:** Enable a check in this field.

**Remote CLID Phone Number 1:** Enter the first number from which the Dial In user may call.

**Remote CLID Phone Number 2:** Enter an alternative number from which the Dial In user may call.

Configuring the WAN parameters (see figure 14)

**LAN Modem WAN IP:** Leave the LAN Modem WAN IP address blank.

**Remote LAN IP:** Enter the IP address assigned by the Dial In User when the user calls in. Please note the address must be on a different subnet to the address of the LAN modem. (In our example the OCLM is 192.168.1.1 and the Dial In user will be given 192.168.2.1)

**Remote LAN Subnet Mask:** Enter the subnet mask assigned to the Dial In user.

**Primary DNS:** Enter the DNS settings to be assigned to the Dial In user.

**Secondary DNS settings:** If there are additional DNS settings enter these in secondary DNS field.

Once all these settings have been entered for the OCLM click on **Submit**.

The screenshot shows a web browser window titled 'MainPage - Microsoft Internet Explorer' with the address bar showing 'http://192.168.1.1/MainPage.htm'. The page content is titled 'Dial-In Configuration' and features a blue sidebar with buttons for 'Dial-In Wizard', 'Dial-In Global', 'Dial-In Users', and '<< Main Menu'. The main content area has a 'Callback Delay' of 5 seconds. Below this is the 'Caller ID Authentication Parameters' section, which includes an 'Enable CLID Authentication' checkbox and two text boxes for 'Remote CLID Phone Number 1' and 'Remote CLID Phone Number 2'. The 'WAN Parameters' section follows, with fields for 'LAN Modem WAN IP', 'Remote LAN IP' (192.168.2.1), 'Remote LAN Subnet Mask' (255.255.255.0), 'Primary DNS', and 'Secondary DNS(optional)'. At the bottom of the form are 'Submit', 'Reset Form', and 'Delete Entry' buttons.

Figure 14

## Dial In Global Parameters

From the Dial In Configuration Menu select the Dial In Global option. Set the parameters for the Dial In Global screen as below (see figure 15):

**Channels Allocated For Dial In:** For test purposes select 1, if allowing both the ISDN channels to receive Dial In calls select 2.

**Allow Multilink:** For test purposes leave this unchecked. If using both channels for the same user place a check on allow multilink.

**Callback Prefix:** Type in a prefix number if needed for an external line.

**Lan-To-Lan Site Number:** Select None for the Lan-To-Lan Site Number.

**PPP Authentication:** This must correspond with the settings under **Dial Up Networking** on the client workstation. It is recommended to check all three settings until the Dial In Configuration has been tested.

Click on **Submit** to save these changes.

The screenshot shows a web browser window titled "MainPage - Microsoft Internet Explorer". The address bar displays "http://192.168.1.1/MainPage.htm". The page content is divided into a blue sidebar on the left and a main white area on the right. The sidebar, titled "Dial-In Configuration", contains four buttons: "Dial-In Wizard", "Dial-In Global" (which is highlighted), "Dial-In Users", and "<< Main Menu". The main area is titled "Dial-In Global Parameters" in blue. It contains the following settings:

- Channels allocated for Dial-In:** Radio buttons for 1 (selected) and 2.
- Allow Multilink?** An unchecked checkbox.
- Callback Prefix:** An empty text input field.
- Lan-to-Lan Site Number:** A dropdown menu with "None" selected.
- PPP Authentication:** Three checked checkboxes: "PAP (Cleartext authentication)", "CHAP (Encrypted authentication)", and "MS-CHAP (Microsoft encrypted authentication)".

At the bottom of the form are two buttons: "Submit" and "Reset Form". The browser's status bar at the bottom shows "Done" and "Internet".

Figure 15

## Configuration Of Incoming Calls From the OCLM

From the OCLM web wizard below click on the **Call Routing** icon. (See figure 16)

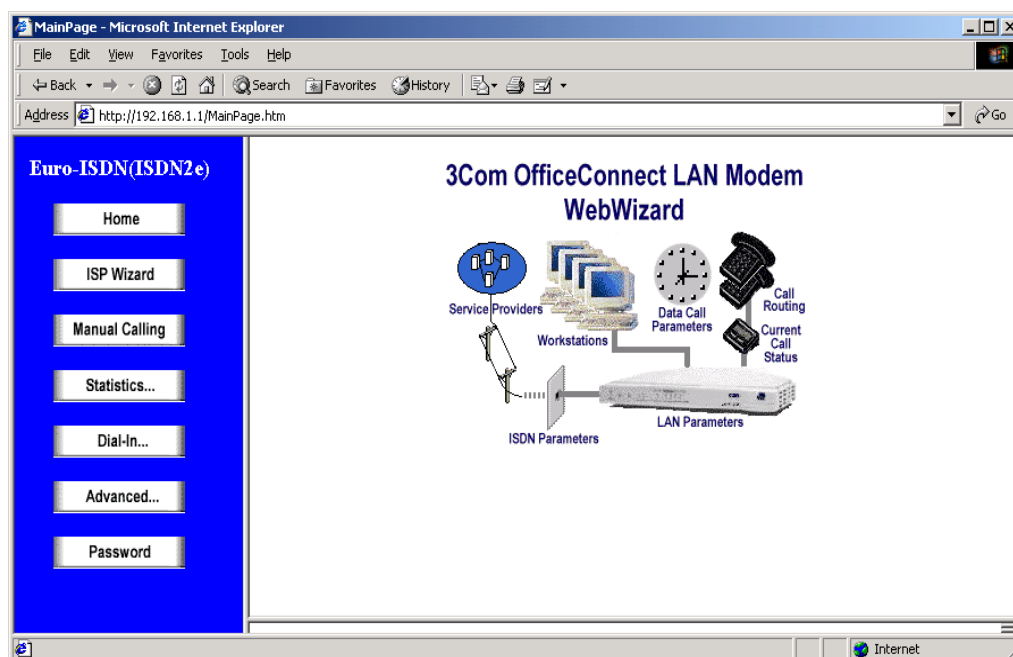


Figure 16

On the Call Routing screen check the boxes to allow calls to be treated as either **data calls** or **phone port calls**. (See figure 17)

Once done click on **Submit**.

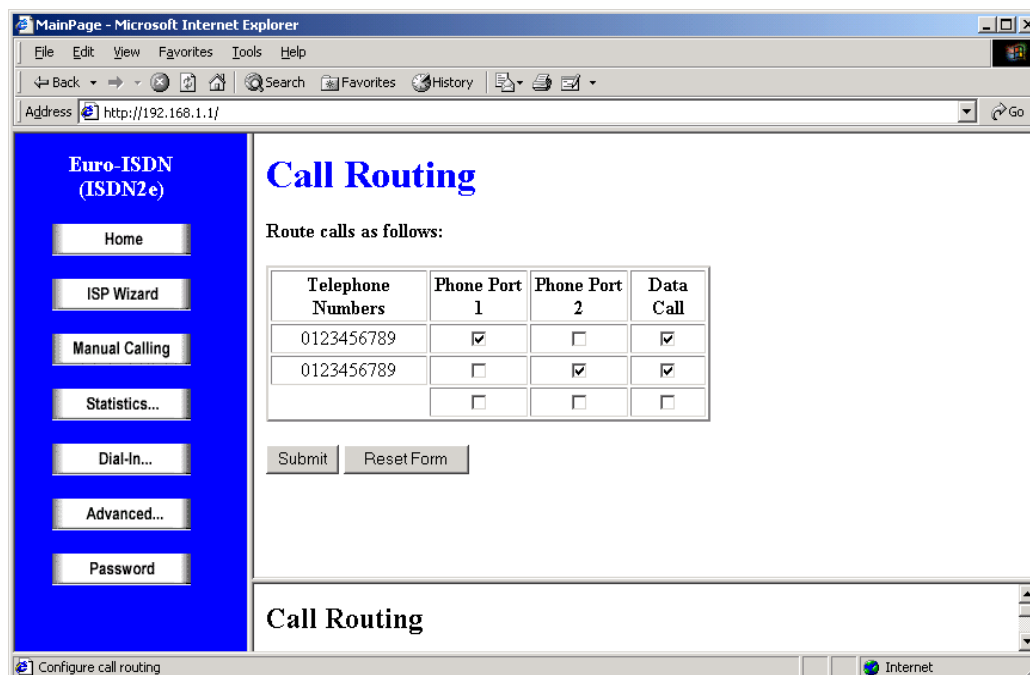


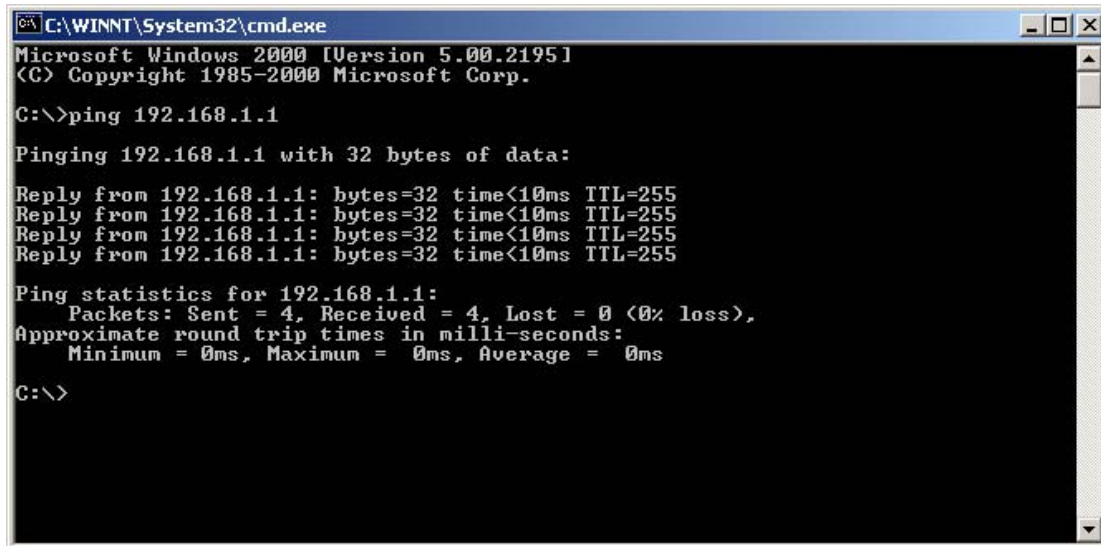
Figure 17

## Testing the Connection

The OCLM is now set up for Dial-in and can now be tested.

Once the call is established and to verify the connection is working correctly from the Dial-in client ping the address of the OCLM from the command prompt as shown in figure 18 and also ping the remote client as shown in figure 19 and figure 20.

If the Default Gateway of a Client PC on the LAN side of the OCLM is set to the address of the OCLM then the remote Dial-in Client should be able to ping the client address on the LAN. This can be shown in figure 20.



```
C:\WINNT\System32\cmd.exe
Microsoft Windows 2000 [Version 5.00.2195]
(C) Copyright 1985-2000 Microsoft Corp.

C:\>ping 192.168.1.1

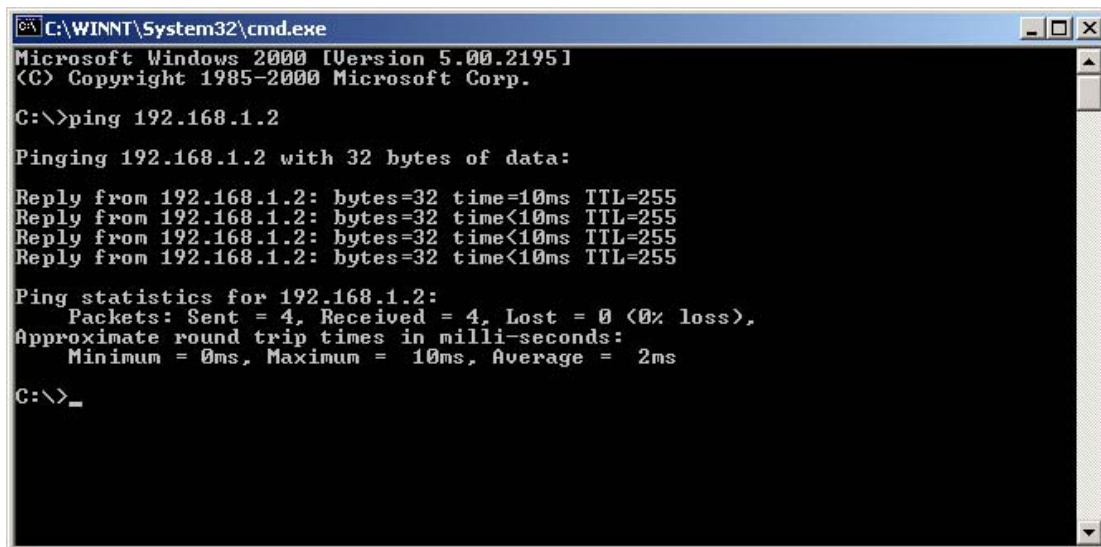
Pinging 192.168.1.1 with 32 bytes of data:

Reply from 192.168.1.1: bytes=32 time<10ms TTL=255
Reply from 192.168.1.1: bytes=32 time<10ms TTL=255
Reply from 192.168.1.1: bytes=32 time<10ms TTL=255
Reply from 192.168.1.1: bytes=32 time<10ms TTL=255

Ping statistics for 192.168.1.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\>
```

Figure 18



```
C:\WINNT\System32\cmd.exe
Microsoft Windows 2000 [Version 5.00.2195]
(C) Copyright 1985-2000 Microsoft Corp.

C:\>ping 192.168.1.2

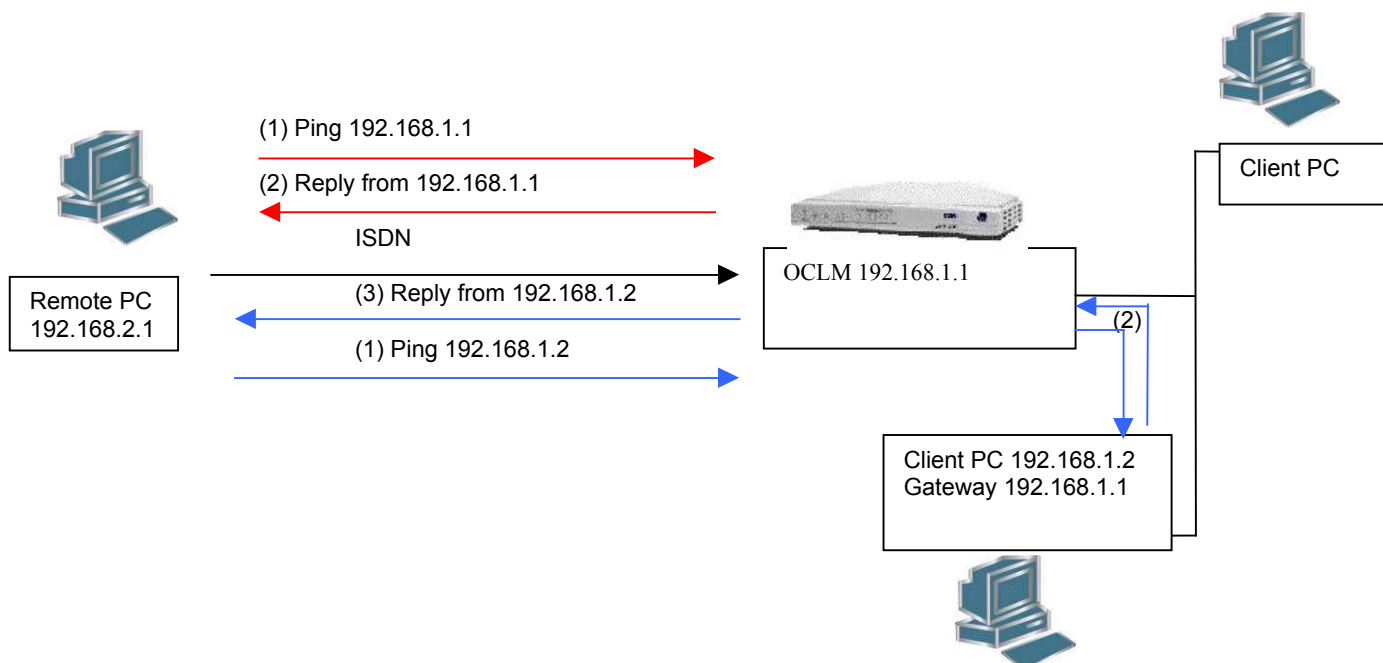
Pinging 192.168.1.2 with 32 bytes of data:

Reply from 192.168.1.2: bytes=32 time=10ms TTL=255
Reply from 192.168.1.2: bytes=32 time<10ms TTL=255
Reply from 192.168.1.2: bytes=32 time<10ms TTL=255
Reply from 192.168.1.2: bytes=32 time<10ms TTL=255

Ping statistics for 192.168.1.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 10ms, Average = 2ms

C:\>_
```

Figure 19



The red Line represents a Ping (1) sent from the Dial in User to the OCLM, The OCLM knows about the Dial in User and replies to the Ping (2)

The Blue Line represents a Ping(1) sent from the "Dial in" PC to a Client PC on the local network. The Client PC has the Gateway specified as the OCLM's IP address, when the PC receives the Ping it does not know the "Dial in" PC on the 192.168.2.0 network and so sends its response to the Gateway (2), the OCLM. The OCLM does know about the "Dial in" PC and forwards the reply to the "Dial in" PC (3).

Figure 20

If after following this guide you are still having problems setting up the OfficeConnect LAN Modem please ensure you have carried out the steps exactly as in this document.

You should also check the 3Com Knowledgebase for additional help (<http://knowledgebase.3com.com>). If problems still persist please contact 3Com Technical Support. (<http://www.3com.com>).

If you found this document useful and would like to see more similar documents please send your feedback to [Customer\\_Support@3Com.com](mailto:Customer_Support@3Com.com) with the subject heading "How To Documentation".

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