

## **INTRODUCTION**

#### **About This Guide:**

This Guide takes you through the basic steps necessary to install and configure your OfficeConnect Cable/DSL Secure Gateway, and establish a connection from your computers to the Internet. Throughout, the OfficeConnect Cable/DSL Secure Gateway is simply referred to as the Gateway.

- One OfficeConnect Cable/DSL Secure Gateway
- One power adapter for use with the Gateway
- Four rubber feet
- One Ethernet cable
- One CD-ROM containing the Gateway Discovery program and the User Guide
- This Installation Guide
- One Support and Safety Information Sheet
- One Warranty Flyer
- Stacking Clip
- User Guide
- License agreement

#### **System Requirements**

Before starting, you must ensure the following:

- You already have a cable or DSL broadband connection to the Internet, with a suitable modem, and that this connection works properly. The modem must have an Ethernet port for connection to your Gateway.
- You have a computer that has an Ethernet connection available and is already correctly configured for communication with the Internet. Your computer must be able to connect to the Internet via the modem, and must
- There are no other DHCP server devices on your local network that are responsible for allocating IP addresses to your computers and other networkconnected devices. Your Gateway will now perform this function by default.

If one or more of these conditions are not met, refer to the comprehensive Gateway User Guide provided for further guidance.

## **DIMENSIONS AND STANDARDS**

#### **Dimensions and Operating Conditions**

ISO 8802/3 Functional: IEEE 802.3, 802.3u CSA 22.2 #950.

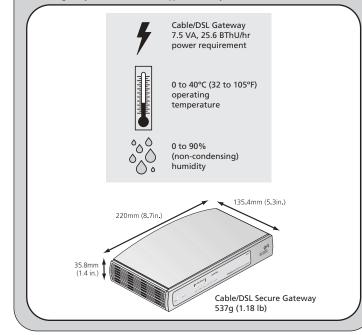
UL 1950, EN 60950 IFC60950

EN 55022 Class B EN 55024 FCC Part 15 Class B\* ICES-003 Class B VCCI Class B

CNS 13438 Class A

Environmental: EN 60068 (IEC 68)

\* Refer to Regulatory Notices section in the Support and Safety Information sheet



#### Safety Information

**WARNING:** Please read the 'Important Safety Information' section in the Support and Safety Information sheet before you start.

POSITIONING YOUR GATEWAY

**VORSICHT:** Bitte lesen Sie den Abschnitt 'Wichtige Sicherheitsinformationen' sorgfältig durch, bevor Sie das Gerät einschalten.

AVERTISSEMENT: Veuillez lire attentivement la section "Consignes importantes de sécurité" avant de mettre en route.

When positioning your Gateway, ensure:

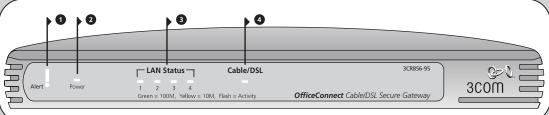
- It is out of direct sunlight and away from sources of heat.
- Cabling is away from power lines, fluorescent lighting fixtures, and sources of electrical noise such as radios, transmitters and broadband
- Water or moisture cannot enter the case of the unit
- Air flow around the unit and through the vents in the side of the case is not restricted. We recommend you provide a minimum of 25mm (1in.) clearance.

#### **Using the Rubber Feet**

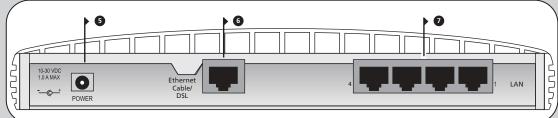
Use the four self-adhesive rubber feet to prevent your Gateway from moving around on your desk or when stacking with other flat top OfficeConnect units. Only stick the feet to the marked areas at each corner of the underside of your Gateway.

## ABOUT YOUR GATEWAY

#### Cable/DSL Secure Gateway - Front



#### Cable/DSL Secure Gateway - Rear



#### 1 Alert LED

orange

Indicates a number of different conditions, as described below.

Off - The Gateway is operating normally.

Flashing quickly (1/2 second on - 1/2 second off) - Indicates one of the following conditions:

- The Gateway has just been started up and is running a self-test routine, or
- The administrator has invoked the *Reset to Factory* Defaults command, or
- The system software is in the process of being upgraded

In each of these cases, wait until the Gateway has completed the current operation and the alert LED is Off

Flashing slowly (2 seconds on - 2 seconds off) - The Gateway has completed the Reset to Factory Defaults process, and is waiting for you to reset the unit. To do this, remove power, wait 10 seconds and then reapply power. The Gateway will then enter the startup sequence and resume normal operation.

On for 2 seconds, and then off - The Gateway has detected and prevented a hacker from attacking your network from the Internet.

Continuously on - A fault has been detected with your Gateway during the start-up process. Refer to the main User Guide.

#### 2 Power LED

green

Indicates that the Gateway is powered on.

#### 3 Four LAN Status LEDs

green (100Mbps link) / yellow (10Mbps link)

If the LED is on, the link between the port and the next piece of network equipment is OK. If the LED is flashing, the link is OK and data is being transmitted or received. If the LED is off, nothing is connected, or the connected device is switched off, or there is a problem with the connection (refer to the "Problem Solving "section).

#### 4 Cable/DSL Status LED

green (100Mbps link) / yellow (10Mbps link)

If the LED is on, the link between the Gateway and the cable or DSL modem is OK. If the LED is flashing, the link is OK and data is being transmitted or received. If the LED is off, nothing is connected, the modem is switched off or there is a problem (refer to the "Problem Solving" section).

#### **5 Power Adapter socket**

Only use the power adapter that is supplied with this Gateway. Do not use any other adapter.

#### 6 Ethernet Cable/DSL port

Use the supplied patch cable to connect the Gateway to the 10/100 port on your cable or DSL modem. This port will automatically adjust for the correct speed, duplex and cable type. Which means you can connect to your Cable/DSL modem using either straight-through or crossover cables.

#### 7 Four 10/100 LAN ports

Use suitable cable with RJ-45 connectors. You can connect your Gateway to a computer, or to any other piece of equipment that has an Ethernet connection (for example, a hub or a switch). These ports will automatically adjust for the correct speed, duplex mode and cable type, which means that you can connect devices to your Gateway using either straight-through or crossover cables.



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# INSTALLING YOUR GATEWAY

Before you install and configure your Gateway, you need the following additional information. If you do not have this information, contact your Internet Service Provider. Space is provided below for you to record this information.

If you have a **DSL connection** and your ISP allocates **IP information** dynamically over PPPoE, you need your User Name and Password. Some ISPs may also require a Service Name

1	PPPoE User Name	
	PPPoE Password	
1	PPPoE Service name	

If your ISP allocates **fixed or static IP information**, you need the following information:

IP Address	
Subnet Mask	
Default Gateway address	
DNS address	

If your ISP allocates **IP information dynamically** over a protocol other then PPPoE, you do not need any further information

#### **Connecting Your Gateway**

- 1. Use the supplied cable to connect the Gateway's Ethernet Cable/DSL port to your Cable/DSL modem. Ensure that your modem is connected to the Internet and switched on.
- 2. Connect your computer to one of the 10/100 LAN ports on the Gateway.
- 3. Connect the power adapter to the Gateway and wait for the Alert LED to stop flashing. Check that the Cable/DSL Status LED is illuminated.
- check that the LAN Port Status LED on the Gateway is illuminated. Refer to Figure 6 for an example configuration.

## CHANGING YOUR COMPUTER'S CONFIGURATION

You may need to make some changes to the configuration of your computers in order to communicate with the Gateway

Follow the instructions below for your particular operating system to ensure that

your computers are configured to obtain an IP address automatically.

#### **DSL Users with PPPoE Client Software**

If you have PPPoE client software installed on your computer, you will need to disable it. To do this:

- **1.** From the Windows *Start* menu, select *Settings* > Control Panel
- **2.** Double click on *Internet Options*.
- 3. Select the Connections Tab. A screen similar to Figure 1 should be displayed.
- 4. Select the Never Dial a Connection option and click OK You may wish to remove the PPPoE client software

from your computer to free resources, as it is not required for use with the Gateway.

**1.** From the Windows *Start* Menu, select *Settings* >

**2.** Double click on *Network and Dial-Up connections* 

**5.** A screen similar to Figure 2 should be displayed.

are both selected as shown in Figure 3. Click OK.

**6.** Ensure that the options *Obtain an IP Address* automatically, and Obtain DNS servers automatically

Select Internet Protocol TCP/IP and click on Properties.

Obtaining an IP Address automatically

For computers using Windows 2000.

3. Double click on Local Area Connection.

Control Panel.

4. Click on Properties.

7. Restart your computer.

# **2.** Double click on *Network*. Select the *TCP/IP* item for your network card as 3. In the TCP/IP dialog, select the IP Address tab, and ensure that Obtain IP Check Cont.

Figure 1

#### 4. Restart your computer. For computers using Windows XP.

- 1. From the Windows Start menu, select Control Panel
- **2.** Click on Network and Internet Connections

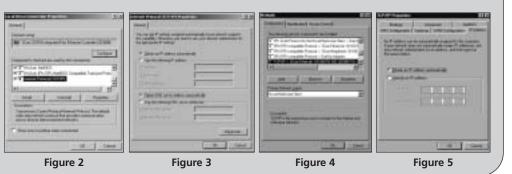
For computers using Windows 95, 98 and ME.

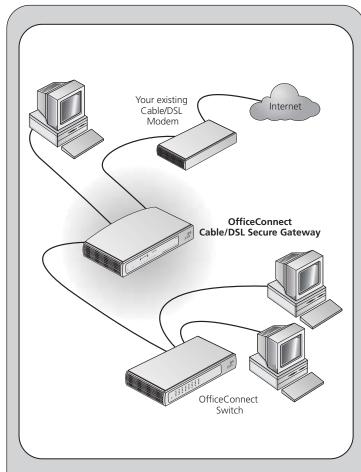
shown in Figure 4 and click on *Properties* 

**1.** From the Windows *Start* Menu, select *Settings > Control Panel*.

address automatically is selected as shown in Figure 5. Click OK.

- 3. Click on the Network Connections icon
- 4. Double click on LAN or High Speed Connection icon. A screen titled Local Area Connection Status will appear
- 5. Select Internet Protocol TCP/IP and click on Properties.
- **6.** Ensure that the options *Obtain an IP Address automatically*, and *Obtain* DNS servers automatically are both selected as shown in Figure 3. Click OK.
- **7.** Restart your computer.





Example Network with OfficeConnect Cable/DSL Secure Gateway.

# **4.** Switch on your computer. Once your computer is ready to use,

# CONFIGURING YOUR GATEWAY

#### **Keeping Your Existing IP Configuration**

If you don't want to change your IP infrastructure or have static IP addresses the Discovery Application, found on the accompanying CD, can be used to locate the Gateway. You can then use the Configuration Wizard to set its IP

Refer to the User Guide for more details.

#### **Running the Configuration Wizard**

- 1. If you haven't already done so, restart your computer.
- 2. Launch your web browser and attempt to contact the Gateway by typing the following URL in the location bar: http://192.168.1.1, If you are able to access the Login page, then your computer has correctly received an IP address from the Gateway.
- **3.** Login using the default password *admin*. The Wizard will attempt to launch automatically, but if it fails, select the Wizard tab and click on the Wizard... button.
- **4.** Where possible, the wizard will recommend settings for most parameters. However, there are some settings which you must provide. Most of these will have been provided to you by your ISP when you set the account up. Refer to section 1 for details.
- 5. By default, 3Com recommends that you leave the LAN IP address for the Gateway as 192.168.1.1. However, if you should choose to change it, make a note of the new address

	Gateway's LAN IP Address	
l		

6. When the DHCP Server Settings page is displayed, make sure that the Enable the DHCP Server with the following settings option is selected.

#### Connecting to the Internet

When the Wizard has completed, attempt to browse to an Internet web site, such as www.3com.com. If you can successfully access this site, then your computer, Gateway and internet modem have been correctly configured.

Now that you have successfully configured your Gateway 3Com recommends, as part of our continuous improvement process, you download the latest firmware from the web at www.3com.com.

Refer to the Problem Solving section if you cannot make contact with the Gateway or the Internet.

#### **Connecting Additional Computers**

You may now connect additional computers to the remaining 10/100 LAN ports on the Gateway. Ensure that each computer you connect to the Gateway has been configured as described in section 2. You should restart each computer whilst it is connected to the Gateway before you try to use it to access the Internet

## PROBLEM SOLVING

If you are experiencing difficulties with your installation, try the following:

- Ensure all networking equipment is switched on. The Gateway should be showing a green Power LED. If it is not, check the power adapter connection. Do not use any power adapter with your Gateway other than the one supplied.
- Ensure the Cable/DSL Modem is connected. The Gateway should be displaying a green or yellow Cable/DSL Status LED. If no LED is displayed, check that your modem is switched on and that it is connected to the Cable/DSL port with an Ethernet cable.
- Ensure that the computer is connected to the Gateway. The Gateway should be displaying a green or yellow LAN Status LED. If it is not, check that the computer is connected to one of the Gateway's LAN ports with an Ethernet cable.
- Ensure your computer is configured correctly. Make sure that the computer obtains an IP address automatically. See Section 2 for details. Ensure that the NIC card is configured for autonegotiation.
- Ensure that you do not have a web proxy enabled on your **computer.** Go to the *Control Panel* and click on *Internet Options*. Select the Connections tab and click on the LAN Settings button at the bottom. Make sure that the *Use Proxy Server* option is unchecked.
- If you are unable to access the Gateway's Web interface. Launch a web browser and enter http://192.168.1.1. If you chose a different IP address, use that instead. Ensure that you include the http:// prefix.
- If you cannot remember the Gateway IP address. Run the Gateway Discovery application from the CD-ROM. This will always connect you to the Gateway.

#### **Cable Internet Connections.**

- Some Cable providers authenticate to the user's computer MAC address. If this is required, go to Internet Settings > Advanced and select Clone the MAC Address. This will copy the MAC address of your computer onto the Internet port of the Gateway.
- Some Cable providers authenticate to the user's Host Name. If this is required, go to Internet Settings and enter the host name of your computer into the Host Name field.

#### **DSL Internet Connections.**

- If you have an existing DSL line and have PPPoE client software installed on your computer, you will need to disable it. See section 2.
- If your DSL line is using PPPoE, go to *Internet Settings* and ensure that PPPoE is enabled. Check that your PPPoE User name and Password are
- Some DSL providers require the use of a PPPoE Service Name. If this is required, go to *Internet Settings* and enter the PPPoE Service Name in the field provided. If it is not required, you must leave it blank.

For further Problem Solving and Technical Support information, refer to the Gateway User Guide.