# A

## **USING DISCOVERY**

# Running the Discovery Application

3Com provides a user friendly Discovery application for detecting the OfficeConnect Wireless Cable/DSL Gateway on the network.

# Windows Installation (95/98/2000/Me/NT)

**1** Insert the Gateway CD-ROM in the CD-ROM drive on your computer. A menu will appear; select *Gateway Discovery*.

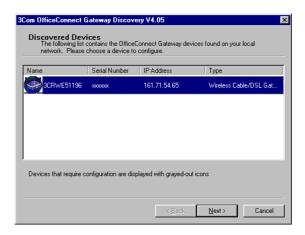
Note: Discovery will find the Gateway even if it is unconfigured or misconfigured.

Figure 57 Discovery Welcome Screen



**2** When the *Welcome* screen is displayed click on *Next* and wait until the application discovers the Gateways connected to your LAN.

Figure 58 Discovered Gateway Screen



**3** Figure 59 shows an example Discovered Devices screen. Highlight the Wireless Cable/DSL Gateway by clicking on it, and press *Next*.

Figure 59 Discovery Finish Screen



**4** Click on *Finish* to launch a web browser and display the login page for the Gateway.

# The Internet Protocol Suite

The Internet protocol suite consists of a well-defined set of communications protocols and several standard application protocols. Transmission Control Protocol/Internet Protocol (TCP/IP) is probably the most widely known and is a combination of two of the protocols (IP and TCP) working together. TCP/IP is an internationally adopted and supported networking standard that provides connectivity between equipment from many vendors over a wide variety of networking technologies.

# Managing the Cable/DSL Gateway over the Network

To manage a device over the network, the Cable/DSL Wireless Gateway must be correctly configured with the following IP information:

- An IP address
- A Subnet Mask

# IP Addresses and Subnet Masks

Each device on your network must have a unique IP address to operate correctly. An IP address identifies the address of the device to which data is being sent and the address of the destination network. IP addresses have the format n.n.n.x where n is a decimal number between 0 and 255 and x is a number between 1 and 254 inclusive.

However, an IP Address alone is not enough to make your device operate. In addition to the IP address, you need to set a subnet mask. All networks are divided into smaller sub-networks and a subnet mask is a number that enables a device to identify the sub-network to which it is connected.

For your network to work correctly, all devices on the network must have:

- The same sub-network address.
- The same subnet mask.



The only value that will be different is the specific host device number. This value must always be unique.

An example IP address is '192.168.100.8'. However, the size of the network determines the structure of this IP Address. In using the Gateway, you will probably only encounter two types of IP Address and subnet mask structures.

#### Type One

In a small network, the IP address of '192.168.100.8' is split into two parts:

- Part one ('192.168.100') identifies the network on which the device resides.
- Part two ('.8') identifies the device within the network.

This type of IP Address operates on a subnet mask of '255.255.255.0'.

See Table 3 for an example about how a network with three computers and a Wireless Cable/DSL Gateway might be configured.

**Table 3** IP Addressing and Subnet Masking

Device	IP Address	Subnet Mask
PC 1	192.168.100.8	255.255.255.0
PC 2	192.168.100.33	255.255.255.0
PC 3	192.168.100.188	255.255.255.0
Wireless Cable/DSL Gateway	192.168.100.72	255.255.255.0

### **Type Two**

In larger networks, where there are more devices, the IP address of '192.168.100.8' is, again, split into two parts but is structured differently:

- Part one ('192.168') identifies the network on which the device resides.
- Part two ('.100.8') identifies the device within the network.

This type of IP Address operates on a subnet mask of '255.255.0.0'.

See Table 4 for an example about how a network (only four computers represented) and a Wireless Cable/DSL Gateway might be configured.

**Table 4** IP Addressing and Subnet Masking

Device	IP Address	Subnet Mask	
PC 1	192.168.100.8	255.255.0.0	
PC 2	192.168.201.30	255.255.0.0	
PC 3	192.168.113.155	255.255.0.0	
PC 4	192.168.002.230	255.255.0.0	
Wireless Cable/DSL Gateway	192.168.002.72	255.255.0.0	

### How does a Device Obtain an IP Address and Subnet Mask?

There are three different ways to obtain an IP address and the subnet mask. These are:

- Dynamic Host Configuration Protocol (DHCP) Addressing
- Static Addressing
- Automatic Addressing (Auto-IP Addressing)

#### **DHCP Addressing**

The Wireless Cable/DSL Gateway contains a DHCP server, which allows computers on your network to obtain an IP address and subnet mask automatically. DHCP assigns a temporary IP address and subnet mask which gets reallocated once you disconnect from the network.

DHCP will work on any client Operating System such as Windows® 95, Windows 98 or Windows NT 4.0. Also, using DHCP means that the same IP address and subnet mask will never be duplicated for devices on the network. DHCP is particularly useful for networks with large numbers of users on them.

### **Static Addressing**

You must enter an IP Address and the subnet mask manually on every device. Using a static IP and subnet mask means the address is permanently fixed.

### **Auto-IP Addressing**

Network devices use automatic IP addressing if they are configured to acquire an address using DHCP but are unable to contact a DHCP server. Automatic IP addressing is a scheme where devices allocate themselves an IP address at random from the industry standard subnet of 169.254.x.x (with a subnet mask of 255.255.0.0). If two devices allocate themselves the same address, the conflict is detected and one of the devices allocates itself a new address.

Automatic IP addressing support was introduced by Microsoft in the Windows 98 operating system and is also supported in Windows 2000.

# TECHNICAL SPECIFICATIONS

This section lists the technical specifications for the OfficeConnect Wireless

Cable/DSL Gateway.

**Interfaces** Cable or DSL modem connection - 10/100 FD.

LAN connection - four 10Mbps/100Mbps dual speed Ethernet ports

(10BASE-T/100BASE-TX)

**WLAN Interface** Standard IEEE 802.11b, Direct Sequence Spread Spectrum (DSSS)

Transmission rate: 11Mbps, automatic fallback to 5.5, 2 or 1Mbps

Maximum channels: 13 Range up to 304.8m (1000ft)

Frequency: (US/Canada/Europe) 2.400-2.4835 GHz

Sensitivity: 1,2,5.5Mbps: -80dBm; 11Mbps -76dBm typical

Modulation: CCK, BPSK, QPSK Encryption: 40/64bit, 128 bit WEP

Maximum clients: 32 O/P Power 15dBm

**Operating Temperature** 0 °C to 40 °C (32 °F to 105 °F)

Power 7VA, 23.9 BThU/hr

**Humidity** 0 % to 90 % (non-condensing) humidity

**Dimensions** • Width = 220 mm (8.7 in.)

 $\blacksquare$  Depth = 135 mm (5.3 in.)

• Height = 24 mm (1 in.)

**Weight** Approximately 592 g (1.3 lbs)

**Standards** Functional: ISO 8802/3

IEEE 802.3

IEEE 802.11b, WiFi

Safety: UL 1950, EN 60950

CSA 22.2 #950 IEC 60950 EMC: EN 55022 Class B

EN 55024 AS/NZS 3548 B FCC Part 15 Class B\* ICES-003 Class B VCCI Class B CNS 13438 Class A ETS 300-826

Radio CFR 47 FCC Part 15.207, 15.209, 15.247 and 15.249.

ETS 300 328 (2.4 GHz ISM band wide band transmission systems)

Environmental: EN 60068 (IEC 68)

\*See "Safety Information" on page 69 for conditions of operation.

### **System Requirements**

### **Operating Systems**

The Wireless Cable/DSL Gateway will support the following Operating Systems:

- Windows 95/98
- Windows NT 4.0
- Windows ME
- Windows 2000
- Windows XP
- Mac OS 8.5 or higher
- Unix

### **Ethernet Performance**

The Wireless Cable/DSL Gateway complies to the IEEE 802.3i, u and x specifications.

### **Wireless Performance**

The Wireless Cable/DSL Gateway complies with the IEEE 802.11b specification and conforms to the WiFi interoperability test standard.



## **Cable Specifications**

The Wireless Cable/DSL Gateway supports the following cable types and maximum lengths:

- Category 3 (Ethernet) or Category 5 (Fast Ethernet or Dual Speed Ethernet)
   Twisted Pair shielded and unshielded cable types.
- Maximum cable length of 100m (327.86 ft).

# **SAFETY INFORMATION**

### **Important Safety** Information



**WARNING**: Warnings contain directions that you must follow for your personal safety. Follow all directions carefully.

You must read the following safety information carefully before you install or remove the unit:



**WARNING**: The Gateway generates and uses radio frequency (rf) energy. In some environments, the use of rf energy is not permitted. The user should seek local advice on whether or not rf energy is permitted within the area of intended use.



**WARNING**: Exceptional care must be taken during installation and removal of the unit.



**WARNING**: Only stack the Gateway with other OfficeConnect units.



**WARNING**: To ensure compliance with international safety standards, only use the power adapter that is supplied with the unit.



**WARNING**: The socket outlet must be near to the unit and easily accessible. You can only remove power from the unit by disconnecting the power cord from the outlet.



**WARNING**: This unit operates under SELV (Safety Extra Low Voltage) conditions according to IEC 950. The conditions are only maintained if the equipment to which it is connected also operates under SELV conditions.



**WARNING**: There are no user-replaceable fuses or user-serviceable parts inside the Gateway. If you have a physical problem with the unit that cannot be solved with problem solving actions in this guide, contact your supplier.



**WARNING**: Disconnect the power adapter before moving the unit.



WARNING: RJ-45 ports. These are shielded RJ-45 data sockets. They cannot be used as telephone sockets. Only connect RJ-45 data connectors to these sockets.

### Wichtige Sicherheitshinweise



**ACHTUNG:** Warnhinweise enthalten Anweisungen, die Sie zu Ihrer eigenen Sicherheit befolgen müssen. Alle Anweisungen sind sorgfältig zu befolgen. Sie müssen die folgenden Sicherheitsinformationen sorafältig durchlesen, bevor Sie das Geräts installieren oder ausbauen:



**ACHTUNG:** Der Gateway erzeugt und verwendet Funkfreguenz (RF). In manchen Umgebungen ist die Verwendung von Funkfrequenz nicht gestattet. Erkundigen Sie sich bei den zuständigen Stellen, ob die Verwendung von Funkfrequenz in dem Bereich, in dem der Bluetooth Access Point eingesetzt werden soll, erlaubt ist.



ACHTUNG: Bei der Installation und beim Ausbau des Geräts ist mit höchster Vorsicht vorzugehen.



ACHTUNG: Stapeln Sie das Geräts nur mit anderen OfficeConnect Gerätes zusammen.



ACHTUNG: Aufgrund von internationalen Sicherheitsnormen darf das Gerät nur mit dem mitgelieferten Netzadapter verwendet werden.



ACHTUNG: Die Netzsteckdose muß in der Nähe des Geräts und leicht zugänglich sein. Die Stromversorgung des Geräts kann nur durch Herausziehen des Gerätenetzkabels aus der Netzsteckdose unterbrochen werden.



ACHTUNG: Der Betrieb dieses Geräts erfolgt unter den SELV-Bedingungen (Sicherheitskleinstspannung) gemäß IEC 950. Diese Bedingungen sind nur gegeben, wenn auch die an das Gerät angeschlossenen Geräte unter SELV-Bedingungen betrieben werden.



**ACHTUNG:** Es sind keine von dem Benutzer zu ersetzende oder zu wartende Teile in dem Gerät vorhanden. Wenn Sie ein Problem mit dem Gateway haben, das nicht mittels der Fehleranalyse in dieser Anleitung behoben werden kann, setzen Sie sich mit Ihrem Lieferanten in Verbindung.



**ACHTUNG:** Vor dem Ausbau des Geräts das Netzadapterkabel herausziehen.



**ACHTUNG: RJ-45-Anschlüsse.** Dies sind abgeschirmte RJ-45-Datenbuchsen. Sie können nicht als Telefonanschlußbuchsen verwendet werden. An diesen Buchsen dürfen nur RJ-45-Datenstecker angeschlossen werden.

### Consignes importantes de sécurité



**AVERTISSEMENT:** Les avertissements présentent des consignes que vous devez respecter pour garantir votre sécurité personnelle. Vous devez respecter attentivement toutes les consignes.

Nous vous demandons de lire attentivement les consignes suivantes de sécurité avant d'installer ou de retirer l'appareil:



AVERTISSEMENT: La Gateway fournit et utilise de l'énergie radioélectrique (radio fréquence -rf). L'utilisation de l'énergie radioélectrique est interdite dans certains environnements. L'utilisateur devra se renseigner sur l'autorisation de cette énergie dans la zone prévue.



**AVERTISSEMENT:** Faites très attention lors de l'installation et de la dépose du groupe.



**AVERTISSEMENT:** Seulement entasser le moyer avec les autres moyeux OfficeConnects.



**AVERTISSEMENT:** Pour garantir le respect des normes internationales de sécurité, utilisez uniquement l'adaptateur électrique remis avec cet appareil.



**AVERTISSEMENT:** La prise secteur doit se trouver à proximité de l'appareil et son accès doit être facile. Vous ne pouvez mettre l'appareil hors circuit qu'en débranchant son cordon électrique au niveau de cette prise.



**AVERTISSEMENT:** L'appareil fonctionne à une tension extrêmement basse de sécurité qui est conforme à la norme CEI 950. Ces conditions ne sont maintenues que si l'équipement auquel il est raccordé fonctionne dans les mêmes conditions.



AVERTISSEMENT: Il n'y a pas de parties remplaceables par les utilisateurs ou entretenues par les utilisateurs à l'intérieur du moyeu. Si vous avez un problème physique avec le moyeu qui ne peut pas être résolu avec les actions de la résolution des problèmes dans ce quide, contacter votre fournisseur.

**AVERTISSEMENT:** Débranchez l'adaptateur électrique avant de retirer cet appareil.



AVERTISSEMENT: Ports RJ-45. Il s'agit de prises femelles blindées de données RJ-45. Vous ne pouvez pas les utiliser comme prise de téléphone. Branchez uniquement des connecteurs de données RJ-45 sur ces prises femelles.

# E

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3Com Corporation, 5400 Bayfront Plaza, P.O. Box 58145, Santa Clara, CA 95052-8145 (408) 326-5000

ISP INFORMATION

## Information Regarding Popular ISPs

WAN Types	Characteristics	Popular ISPs		
Dynamic IP	Cable modem ISP, non-hostname	MediaOne, RoadRunner, Optimum Online, Time Warner, Charter, Adelphia, Metrocast.		
(Clone MAC)	based. Need to clone the MAC address in the Advanced tab of the Internet Settings page.			
Dynamic IP	Cable ISP, Requires Hostname to	@Home Network, Cogoco,		
(Hostname)	authenticate ie. cx213818-B. Need to enter the hostname in the Internet Settings page.	ComCast, Cox, Excite, Rogers, Shaw, Insight, Videotron		
PPPoE	Usually special software installed	Bell*, Century Tel, Citizens,		
(DSL)	on PC, MacPOET/WinPOET, EnterNet 300. The Gateway has this software built in and you can remove it from your PC. You will need to enter the user name and password that your ISP provided to you in the PPPOE page of the Gateway. Leave the service name blank unless your ISP requires it.	Primus, Prodigy, Snet, Sprint FC, Verizon, First World, Brightnet, Earthlink, Ameritech, Covad, Mindspring, Sympatico DSL, USwest, Owest, SNet		
C:	Inc. M. J.			
Static (DSL)	DSL Modem, always on. Need to enter ALL IP information from ISP in the Static IP address section of the Internet Settings page.	CableSpeed, Cnet, Direct Link, Drizzle, DSL Extreme, Earthlink Wireless, Fast Point, Flashcom, GTE-WhirlWind, Heavenet, HSA Corp, I-55, InterAccess, LinkLine, Mission, Nauticom, NAS, Omitel, Onterra, Phatpipe, Rhythms, Speakeasy, Sterling, XO, Zyan		
Static (Cable)	Cable Modem, Always on, ISP assigns specific IP information which needs to be entered on the "Fixed IP" page of the Gateway.	Cox Cable, Sprint, US Cable, Cable-Cable		

<sup>\*</sup>Bell includes Bell Advantage, Bell Canada, Bell South, PacBell and Southwestern Bell.

# **GLOSSARY**

**Auto-negotiation** 

**Bandwidth** 

**Category 3 Cables** 

**802.11b** The IEEE standard to which the 3Com OfficeConnect Wireless Cable/DSL Gateway conforms. This standard provides for 1,2,5 and 11Mbps data rates and a set of fundamental signaling methods and other services (see WECA).

**10BASE-T** The IEEE specification for 10 Mbps Ethernet over Category 3, 4 or 5 twisted pair cable.

**100BASE-TX** The IEEE specification for 100 Mbps Fast Ethernet over Category 5 twisted-pair cable.

Access Point An Access Point is a device through which wireless clients connect to other wireless clients and which acts as a bridge between wireless clients and a wired network, such as Ethernet. Wireless clients can be moved anywhere within the coverage area of the access point and still connect with each other. If connected to an Ethernet network, the access point monitors Ethernet traffic and forwards appropriate Ethernet messages to the wireless network, while also monitoring wireless client radio traffic and forwarding wireless client messages to the Ethernet LAN.

Ad Hoc mode

Ad Hoc mode is a configuration supported by most wireless clients. It is used to connect a peer to peer network together without the use of an access point. It offers lower performance than infrastructure mode, which is the mode the gateway uses. (see also Infra-structure mode.)

Some devices in the OfficeConnect range support auto-negotiation. Auto-negotiation is where two devices sharing a link, automatically configure to use the best common speed. The order of preference (best first) is: 100BASE-TX full duplex, 100BASE-TX half duplex, 10BASE-T full duplex, and 10BASE-T half duplex. Auto-negotiation is defined in the IEEE 802.3 standard for Ethernet and is an operation that takes place in a few milliseconds.

The information capacity, measured in bits per second, that a channel can transmit. The bandwidth of Ethernet is 10 Mbps, the bandwidth of Fast Ethernet is 100 Mbps. The bandwidth for 802.11b wireless is 11Mbps.

One of five grades of Twisted Pair (TP) cabling defined by the EIA/TIA-586 standard. Category 3 is voice grade cable and can only be used in Ethernet networks (10BASE-T) to transmit data at speeds of up to 10 Mbps.

Category 5 Cables One of five grades of Twisted Pair (TP) cabling defined by the EIA/TIA-586 standard. Category 5 can be used in Ethernet (10BASE-T) and Fast Ethernet

networks (100BASE-TX) and can transmit data up to speeds of 100 Mbps. Category 5 cabling is better to use for network cabling than Category 3, because it supports both Ethernet (10 Mbps) and Fast Ethernet (100 Mbps) speeds.

Channel

Similar to any radio device, the OfficeConnect Wireless Cable/DSL gateway allows you to choose different radio channels in the wireless spectrum. A channel is a particular frequency within the 2.4GHz spectrum within which the Gateway operates.

**Client** The term used to described the desktop PC that is connected to your network.

DHCP Dynamic Host Configuration Protocol. This protocol automatically assigns an IP address for every computer on your network. Windows 95, Windows 98 and Windows NT 4.0 contain software that assigns IP addresses to workstations on a network. These assignments are made by the DHCP server software that runs on Windows NT Server, and Windows 95 and Windows 98 will call the server to

can be found.

**DNS Server Address** DNS stands for Domain Name System, which allows Internet host computers to

have a domain name (such as 3com.com) and one or more IP addresses (such as 192.34.45.8). A DNS server keeps a database of host computers and their respective domain names and IP addresses, so that when a domain name is requested (as in typing "3com.com" into your Internet browser), the user is sent to the proper IP address. The DNS server address used by the computers on your

obtain the address. Windows 98 will allocate itself an address if no DHCP server

home network is the location of the DNS server your ISP has assigned.

**DSL modem** DSL stands for digital subscriber line. A DSL modem uses your existing phone lines

to send and receive data at high speeds.

**Encryption** A method for providing a level of security to wireless data transmissions. The

OfficeConnect Wireless Cable/DSL Gateway uses two levels of encryption; 40/64 bit and 128 bit. 128 bit is a more powerful level of encryption than 40/64 bit.

Extended Service Set Identifier. The ESSID is a unique identifier for your wireless network. You must have the same ESSID entered into the gateway and each of it's

wireless clients.

**Ethernet** A LAN specification developed jointly by Xerox, Intel and Digital Equipment

Corporation. Ethernet networks use CSMA/CD to transmit packets at a rate of 10

Mbps over a variety of cables.

**Ethernet Address** See MAC address.

**ESSID** 

**Fast Ethernet** An Ethernet system that is designed to operate at 100 Mbps.

**Firewall** Electronic protection that prevents anyone outside of your network from seeing

your files or damaging your computers.

**Full Duplex** 

A system that allows packets to be transmitted and received at the same time and, in effect, doubles the potential throughput of a link.

Gateway

A device that acts as a central hub by connecting to each computer's network interface card and managing the data traffic between the local network and the Internet.

**Half Duplex** 

A system that allows packets to transmitted and received, but not at the same time. Contrast with full duplex.

Hub

A device that regenerates LAN traffic so that the transmission distance of that signal can be extended. Hubs are similar to repeaters, in that they connect LANs of the same type; however they connect more LANs than a repeater and are generally more sophisticated.

**IEEE** Institute of Electrical and Electronics Engineers. This American organization was founded in 1963 and sets standards for computers and communications.

IETF

Internet Engineering Task Force. An organization responsible for providing engineering solutions for TCP/IP networks. In the network management area, this group is responsible for the development of the SNMP protocol.

Infra-structure mode

Infra-Structure mode is the 802.11b configuration supported by the Gateway. You will need to ensure all of your clients are set up to use infra-structure mode in order for them to communicate with the Access Point built into your Gateway. (see also Ad Hoc mode)

**IP** Internet Protocol. IP is a layer 3 network protocol that is the standard for sending data through a network. IP is part of the TCP/IP set of protocols that describe the routing of packets to addressed devices. An IP address consists of 32 bits divided into two or three fields: a network number and a host number or a network number, a subnet number, and a host number.

**IP Address** 

Internet Protocol Address. A unique identifier for a device attached to a network using TCP/IP. The address is written as four octets separated with periods (full-stops), and is made up of a network section, an optional subnet section and a host section.

**ISP** Internet Service Provider. An ISP is a business that provides connectivity to the Internet for individuals and other businesses or organizations.

LAN Local Area Network. A network of end stations (such as PCs, printers, servers) and network devices (hubs and switches) that cover a relatively small geographic area (usually not larger than a floor or building). LANs are characterized by high transmission speeds over short distances (up to 1000 metres).

**MAC** Media Access Control. A protocol specified by the IEEE for determining which devices have access to a network at any one time.

#### **MAC Address**

Media Access Control Address. Also called the hardware or physical address. A layer 2 address associated with a particular network device. Most devices that connect to a LAN have a MAC address assigned to them as they are used to identify other devices in a network. MAC addresses are 6 bytes long.

#### NAT

Network Address Translation. NAT enables all the computers on your network to share one IP address. The NAT capability of the Gateway allows you to access the Internet from any computer on your home network without having to purchase more IP addresses from your ISP.

#### Network

A Network is a collection of computers and other computer equipment that are connected for the purpose of exchanging information or sharing resources. Networks vary in size, some are within a single room, others span continents.

# Network Interface Card (NIC)

A circuit board installed into a piece of computing equipment, for example, a computer, that enables you to connect it to the network. A NIC is also known as an adapter or adapter card.

#### Protocol

A set of rules for communication between devices on a network. The rules dictate format, timing, sequencing and error control.

#### **PPPoE**

Point-to-Point Protocol over Ethernet. Point-to-Point Protocol is a method of secure data transmission originally created for dial-up connections; PPPoE is for Ethernet connections.

**RJ-45** 

A standard connector used to connect Ethernet networks. The "RJ" stands for "registered jack".

Server

A computer in a network that is shared by multiple end stations. Servers provide end stations with access to shared network services such as computer files and printer queues.

SSID

Service Set Identifier. Some vendors of wireless products use SSID interchangeably with ESSID.

#### **Subnet Address**

An extension of the IP addressing scheme that allows a site to use a single IP network address for multiple physical networks.

### Subnet mask

A subnet mask, which may be a part of the TCP/IP information provided by your ISP, is a set of four numbers configured like an IP address. It is used to create IP address numbers used only within a particular network (as opposed to valid IP address numbers recognized by the Internet, which must assigned by InterNIC).

Subnets

A network that is a component of a larger network.

### Switch

A device that interconnects several LANs to form a single logical LAN that comprises of several LAN segments. Switches are similar to bridges, in that they

connect LANs of a different type; however they connect more LANs than a bridge and are generally more sophisticated.

TCP/IP

Transmission Control Protocol/Internet Protocol. This is the name for two of the most well-known protocols developed for the interconnection of networks. Originally a UNIX standard, TCP/IP is now supported on almost all platforms, and is the protocol of the Internet.

TCP relates to the content of the data travelling through a network — ensuring that the information sent arrives in one piece when it reaches its destination. IP relates to the address of the end station to which data is being sent, as well as the address of the destination network.

**Traffic** The movement of data packets on a network.

**WAN** Wide Area Network. A network that

Wide Area Network. A network that connects computers located in geographically separate areas (for example, different buildings, cities, or countries). The Internet is an example of a wide area network.

WECA Wireless Ethernet Compatibility Alliance. An industry group formed to certify cross vendor interoperability and compatibility of 802.11b wireless networking products and to promote the standard for enterprise, small business and home environments. (see also 802.11b, Wi-Fi)

**WEP** Wired Equivalent Privacy. A shared key encryption mechanism for wireless networking. Encryption strength is 40/64 bit or 128 bit.

**WiFi** Wireless Fidelity. This is the certification granted by WECA to products that meet their interoperability criteria. (see also 802.11b, WECA)

**Wireless Client** The term used to describe a desktop or mobile PC that is wirelessly connected to your wireless network

Wireless LAN Service Another term for ESSID (Extended Service Set Identifier)
Area

**Wizard** A Windows application that automates a procedure such as installation or configuration.

**WLAN** Wireless Local Area Network. A WLAN is a group of computers and devices connected together by wireless in a relatively small area (such as a house or office).

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# **REGULATORY NOTICES**

### **FCC Statement**

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules, and the Canadian Department of Communications Equipment Standards entitled, "Digital Apparatus," ICES-003. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

#### Information to the User

If this equipment does cause interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient the receiving antenna.
- Relocate the equipment with respect to the receiver.
- Move the equipment away from the receiver.
- Plug the equipment into a different outlet so that equipment and receiver are on different branch circuits.
- Consult the dealer or an experienced radio/television technician for help.

The user may find the following booklet prepared by the Federal Communications Commission helpful:

How to Identify and Resolve Radio-TV Interference Problems

This booklet is available from the U.S. Government Printing Office, Washington, DC 20402, Stock No. 004-000-00345-4. In order to meet FCC emissions limits, this equipment must be used only with cables which comply with IEEE 802.3.

# FCC Declaration of Conformity

We declare under our sole responsibilty that the

Model: Description:

3CRWE51196 Wireless Cable/DSL Gateway

to which this declaration relates, is in conformity with the following standards or other normative documents:

- ANSI C63.4-1992 Methods of Measurement
- Federal Communications Commission 47 CFR Part 15, subpart B
   15.107 (a)Class B Conducted Limits
   15.109 (a)Class B Radiated Emissions Limits

■ 15.107 (e)Class B Conducted Limits 15.109 (g)Class B Radiated Emissions Limits

Exposure to Radio Frequency Radiation: The radiated output power of the 3Com OfficeConnect Wireless Cable/DSL Gateway is far below the FCC radio frequency exposure limits. Nevertheless, the 3Com OfficeConnect Wireless Cable/DSL Gateway shall be used in such manner that the potential for human contact during normal operation is minimized. The distance between the antennas and the user should not be less than 5.0 cm.

### **CE Statement (Europe)**

This product complies with the European Low Voltage Directive 73/23/EEC, EMC Directive 89/336/EEC as ammended by European Directive 93/68/EEC and the Radio and Telecommunications Terminal Equipment Directive 99/5/EC.

#### **CSA Statement**

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

Cet appareil numérique de la classe B respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

#### **BSMI Statement**

警告使用者:這是甲類的資訊產品,在居住的 環境中使用時,可能會造成射頻干擾,在這種 情況下,使用者會被要求採取某些適當的對策。

#### **VCCI Statement**

この装置は、情報処理装置等電波障害自主規制協議会(VCCI)の基準に 基づくクラスA情報技術装置です。この装置を家庭環境で使用すると電波妨害を引き起こすことがあります。この場合には使用者が適切な対策を講ずるよう要求されることがあります。

### **RF Exposure Compliance Statement** (U.S.)

**CAUTION**: The 3Com OfficeConnect Wireless Cable/DSL Gateway has been certified as a mobile computing device as per FCC Section 2.1091. In order to comply with the FCC RF exposure requirements, the 3Com OfficeConnect Wireless Cable/DSL Gateway must only be installed with approved antennas and a minimum separation distance of 20 cm (8 in) must be maintained from the antenna to any nearby persons.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

### **Potential RF Interference (Canada)**



**CAUTION**: To prevent radio interference to the licensed service, this device is intended to be operated indoors and away from windows to provide maximum shielding. Equipment (or it's transmit antenna) that is installed outdoors is subject to licensing.

3Com Corporation, Corporate Headquarters, 5400 Bayfront Plaza, Santa Clara, CA 95052-8145, USA.

To learn more about 3Com products and services, visit our World Wide Web site at **www.3com.com** 

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