

3

RUNNING THE SETUP WIZARD

Accessing the Wizard

3Com recommends that you perform the initial Access Point configuration from a computer that is directly connected to one of the LAN ports and not from a wireless connection.

However, you may configure the Access Point from a wireless admin computer but, note that you may lose contact with the Access Point if you change the wireless configuration. To communicate with the Access Point, your wireless NIC should be set as follows:

- WEP encryption - none
- Service Area Name/SSID - 3Com

The Access Point setup program is Web-based, which means that it is accessed through your Web browser (Netscape Navigator or Internet Explorer).

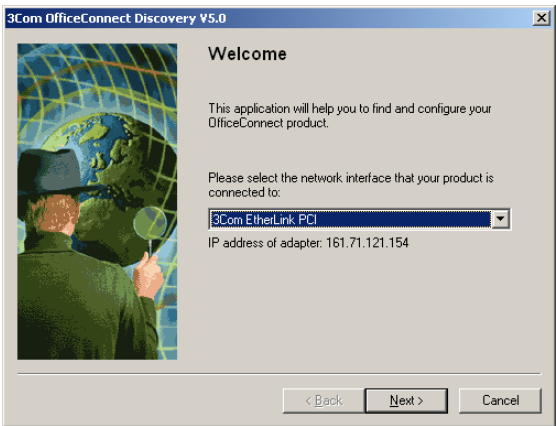
To use the Setup Wizard:

- 1 Ensure that you have at least one computer connected to the Access Point. Refer to [Chapter 2](#) for details on how to do this.
- 2 Insert the Access Point CD-ROM in the CD-ROM drive on your computer. A menu will appear; select *Gateway Discovery*.



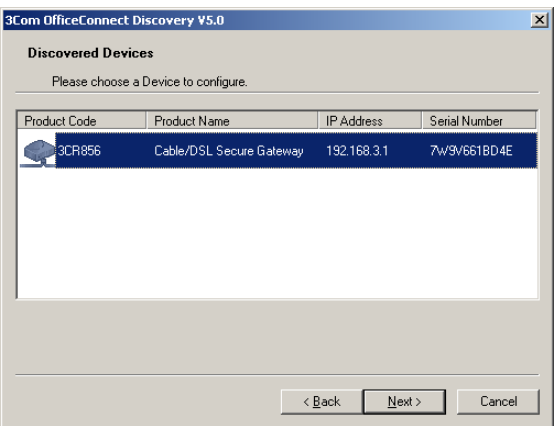
Discovery will find the Access Point even if it is unconfigured or misconfigured.

Figure 5 Discovery Welcome Screen



- 3 When the *Welcome* screen is displayed, select the NIC from which the Access Point will be discovered. Then click on *Next* and wait until the application discovers the Access Points connected to your LAN.

Figure 6 Discovered Access Point Screen



- 4 [Figure 6](#) shows an example Discovered Devices screen. Highlight the *11Mbps Wireless Access Point* by clicking on it, and press *Next*.

Figure 7 Discovery Finish Screen

- 5 Click on *Finish* to launch a web browser and display the login page for the Access Point as shown in [Figure 8](#).
- 6 To log in, enter the password (the default setting is **admin**) in the *System Password* field and click *Log in* ([Figure 8](#)).



Be sure to bookmark this screen for easy reference if you should want to change the Access Point settings.

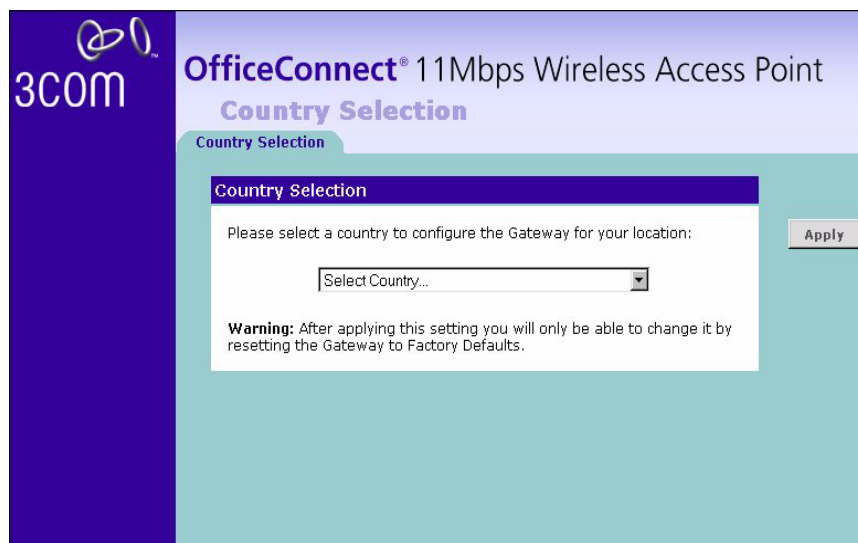
Figure 8 Access Point Login Screen

- 7 If the password is correct, the *Country Selection* screen appears. Select the country you wish to configure the Access Point for, then click *Apply*. ([Figure 9](#)).



This screen is only displayed on initial configuration of the Access Point.

Figure 9 Country Selection Screen



- 8 When you have logged in and selected a country either:
- The *Welcome* screen will appear ([Figure 10](#)). Select the *Wizard* tab and click *Wizard*.
 - or
 - If your Access Point has not been configured before, the Wizard will launch automatically (refer to [Figure 11](#)).
- 9 Click *Next*.
- 10 You will be guided step by step through a basic setup procedure.

Figure 10 Welcome Screen

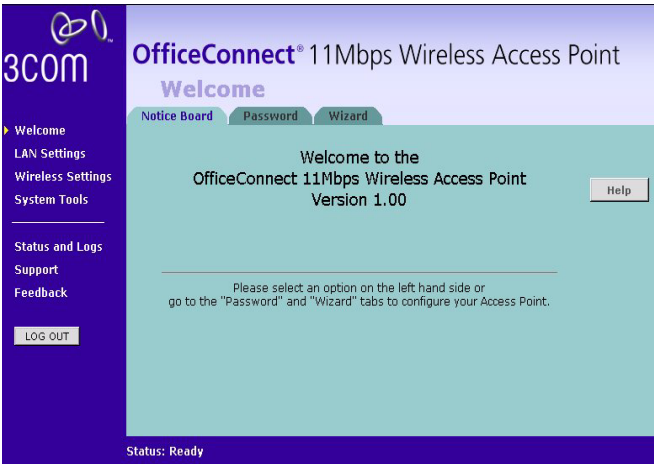
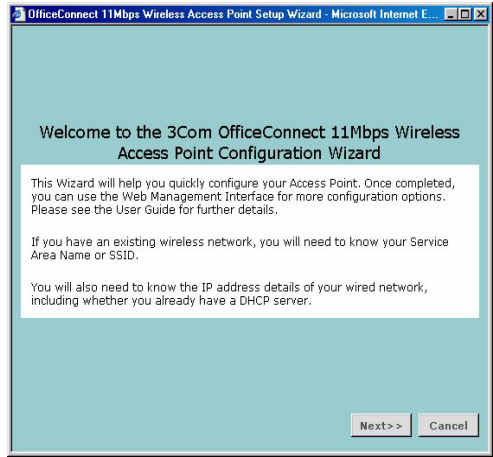
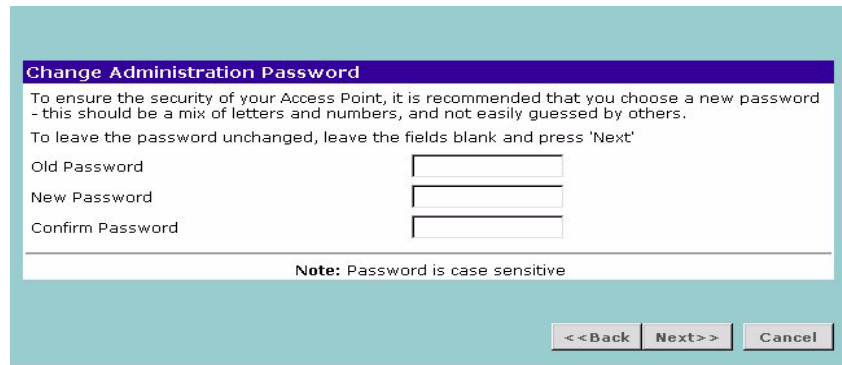


Figure 11 Wizard Screen



Password **Figure 12** Change Administration Password Screen


Change Administration Password

To ensure the security of your Access Point, it is recommended that you choose a new password - this should be a mix of letters and numbers, and not easily guessed by others.

To leave the password unchanged, leave the fields blank and press 'Next'

Old Password

New Password

Confirm Password

Note: Password is case sensitive

<<Back Next>> Cancel

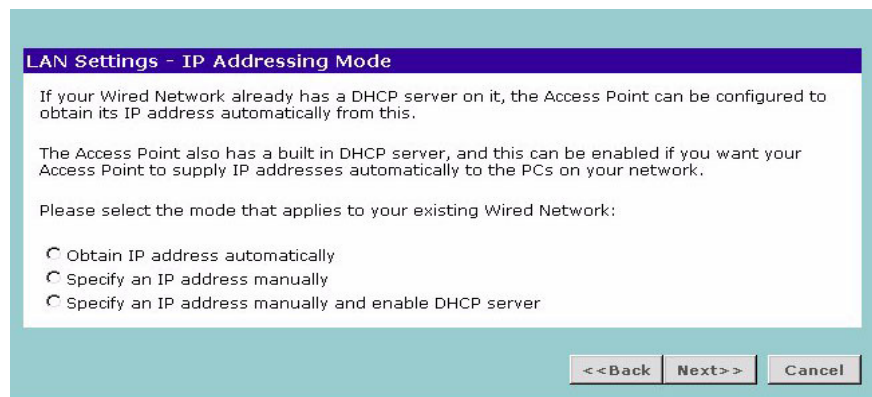
When the *Change Administration Password* screen ([Figure 12](#)) appears, type the *Old Password*, then a new password in both the *New Password* and *Confirm Password* boxes.



*3Com recommends entering a new password when setting up the Access Point for the first time. The Access Point is shipped from the factory with a default password, **admin**.*

1. *Password is case sensitive.*
2. *Write the new password down and keep it in a safe place, so that you can change your settings in the future.*

Click *Next*.

LAN Settings **Figure 13** LAN Settings Screen


LAN Settings - IP Addressing Mode

If your Wired Network already has a DHCP server on it, the Access Point can be configured to obtain its IP address automatically from this.

The Access Point also has a built in DHCP server, and this can be enabled if you want your Access Point to supply IP addresses automatically to the PCs on your network.

Please select the mode that applies to your existing Wired Network:

☐ Obtain IP address automatically

☐ Specify an IP address manually

☐ Specify an IP address manually and enable DHCP server

<<Back Next>> Cancel

This screen determines how the Access Point obtains its IP address. There are three options.

Obtain IP Address automatically - The Access Point will obtain an IP address from a DHCP server already operating on your network.

Specify an IP address manually - Select this option to manually configure the IP address of the Access Point. The screen shown in [Figure 14](#) is displayed. This screen displays a suggested LAN IP address and subnet mask of the Access Point. It also allows you to change the IP address and subnet mask.



3Com recommends that you manually assign your Access Point a static IP address.

Figure 14 LAN IP Address Screen

LAN Settings - LAN IP Address

The fields below show a suggested LAN IP address and subnet mask for your Access Point. If these values are not suitable, please change them, and then press "Next" to continue.

IP Address: 192.168.1.1

Subnet Mask: 255.255.255.0

<<Back Next>> Cancel

Specify an IP address manually and enable DHCP server - The Access Point contains a Dynamic Host Configuration (DHCP) server that can automatically configure the TCP/IP settings of every computer on your network.

To activate the DHCP Server option, select *Specify an IP Address manually and Enable DHCP server*. The screen shown in [Figure 15](#) opens.

Figure 15 DHCP Server Setup Screen

LAN Settings - LAN IP Address

The fields below show a suggested LAN IP address and subnet mask for your Access Point. If these values are not suitable, please change them, and then press "Next" to continue.

IP Address	192.168.1.1
Subnet Mask	255.255.255.0
IP Pool Start Address	
IP Pool End Address	

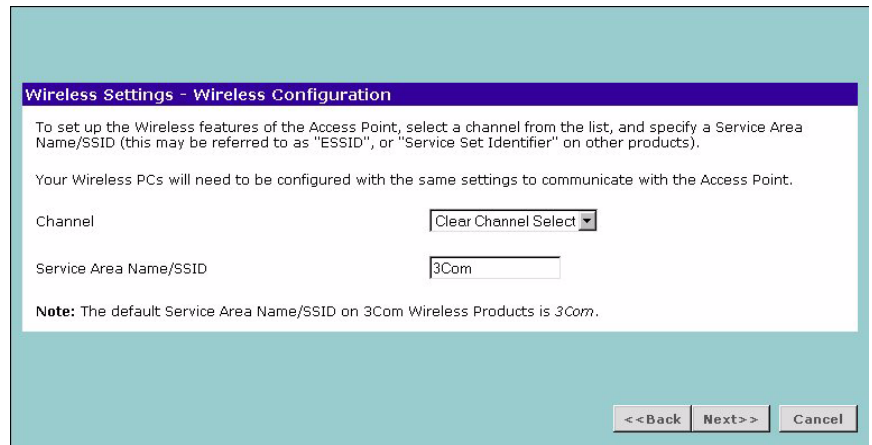
This screen displays a suggested LAN IP address and subnet mask of the Access Point. It also allows you to change the IP address and subnet mask.

Two further fields are available for you to enter the *Start* address of an address pool and an *End* address. The largest available continuous IP pool will be automatically entered; if this is not appropriate, make your required changes.



Before enabling the DHCP Server, ensure that there are no other DHCP servers running on your network.

Wireless Settings **Figure 16** Wireless Configuration Screen



Wireless Settings - Wireless Configuration

To set up the Wireless features of the Access Point, select a channel from the list, and specify a Service Area Name/SSID (this may be referred to as "ESSID", or "Service Set Identifier" on other products).

Your Wireless PCs will need to be configured with the same settings to communicate with the Access Point.

Channel

Service Area Name/SSID

Note: The default Service Area Name/SSID on 3Com Wireless Products is 3Com.

<< Back Next >> Cancel

This screen displays the current *Channel* and *Service Area Name*. It also allows you to change these settings. There are a maximum of 13 channels, the number available to you is dependent on the country you reside in. The *Service Area Name* default for 3Com products is "3Com". Up to 32 (case sensitive) characters can be entered for the *Service Area Name*.

3Com strongly recommends that you change the *SSID* to something other than the default.



For information on improving your Wireless network security see ["Wireless Settings"](#) on [page 37](#).



If you are configuring the Access Point from a wireless computer any changes you make to the wireless configuration will result in communication between the Access Point and your computer being lost. This is why 3Com strongly recommends that you configure the Access Point from a wired computer.

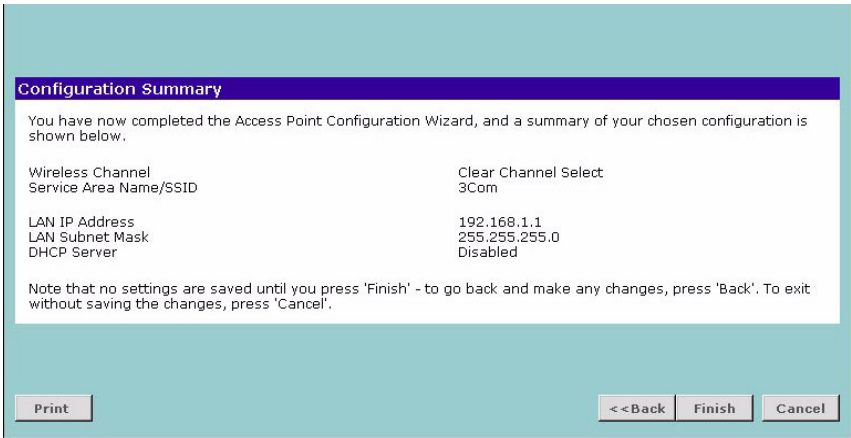


It is very important that you set up your wireless clients to use the same Service Area Name or SSID as the one you use on this screen. If your clients use a different Service Area Name then they will not be able to communicate with the Access Point.



The choice of channel is less important as Clients will generally search all of the available channels. You should however make a note of the channel you select as this may be useful if you experience problems with your clients.

Summary **Figure 17** Configuration Summary Screen



When you complete the Setup Wizard, a configuration summary will display. Verify the configuration information of the Access Point and then click *Finish* to save your settings. 3Com recommends that you print this page for your records.

If you have made changes to the LAN Settings or wireless configuration options, you may need to reconfigure the computer you are using in order to make contact with the Access Point again.

Your Access Point is now configured and ready for use.

See [Chapter 4](#) for a detailed description of the Access Point configuration screens.

4

ACCESS POINT CONFIGURATION

Navigating Through the Access Point Configuration Pages

This chapter describes all the screens available through the Access Point configuration pages, and is provided as a reference. To get to the configuration pages, browse to the Access Point by entering the URL in the location bar of your browser. The URL is **http://<IP Address of the Access Point>**, for example **http://192.168.1.1**. When you have browsed to the Access Point, log in using your system password (default **admin**).

Main Menu

At the left side of all screens is a main menu, as shown in [Figure 18](#) on [page 32](#). When you click on a topic from the main menu, that page will appear in the main part of the screen.

- Welcome - displays the firmware version of the Access Point, allows you to change your password, and launch the Wizard
- LAN Settings - allows you to configure IP address and subnet mask information, setup DHCP server parameters, and display the DHCP client list.
- Wireless Settings - enables /disables access from wireless computers, and provides facilities for improving the security of the wireless network.
- System Tools - allows the administrator to perform maintenance activities on the Access Point.
- Status and Logs - displays the current status and activity logs of the Access Point.
- Support - contains a comprehensive online help system

Option Tabs

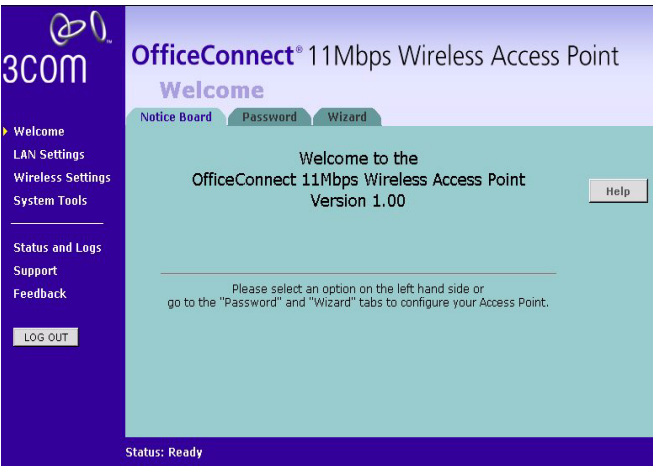
Each corresponding menu page may also provide sub-sections which are accessed through the use of tabs (see [Figure 18](#) for example). To access a sub-section, simply click on the required tab.

Getting Help

On every screen, a Help button is available which provides access to the context-sensitive online help system. Click *Help* for further assistance and guidance relating to the current screen.

Welcome Screen

Figure 18 Access Point Welcome Screen



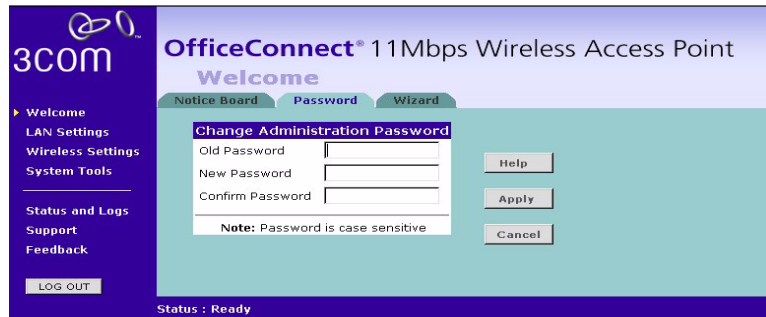
The *Welcome* section allows you to view the Notice board and to change your Password. You can also gain access to the Configuration Wizard. (See [“Accessing the Wizard”](#) on [page 21](#) for details).

Notice Board

Figure 19 Notice Board Screen



The Notice Board is used to display configuration warning messages.

Password Figure 20 Password Screen

Changing the Administration Password

You can change the password to prevent unauthorized access to the Administration System. To do this:

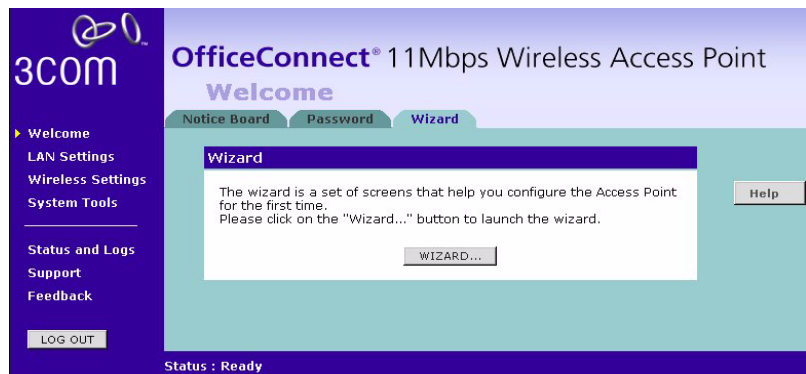
- 1 Enter the current password in the *Old Password* field
- 2 Enter the new password in the *New Password* field
- 3 Enter the new password again in the *Confirm Password* field
- 4 Click *Apply* to save the new password



The password is case sensitive.



If you have forgotten your password you need to reset the Access Point. See [“Forgotten Password and Reset to Factory Defaults”](#) on [page 54](#)

Wizard Figure 21 Wizard Screen

Click **WIZARD...** to launch the configuration wizard. Refer to [Chapter 3](#) for information on how to run the wizard.

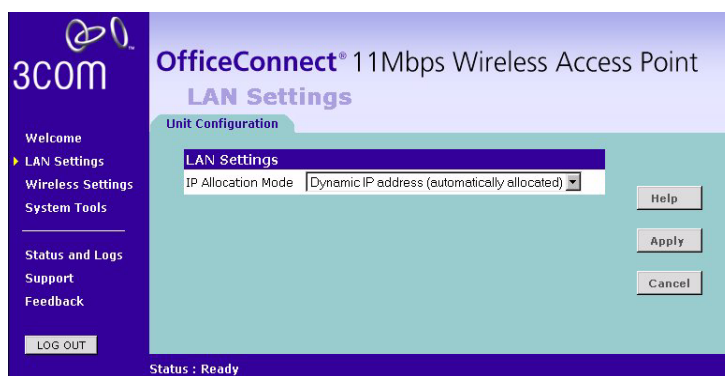
LAN Settings

The LAN Settings menu provides the following options:

Unit Configuration

The LAN Settings screen is used to determine how the LAN IP address of your Access Point is obtained. It can be obtained automatically or you can manually configure the IP address and optionally configure the DHCP server.

Figure 22 Unit Configuration Screen



Dynamic IP Address



3Com recommends that you manually assign your Access Point a static IP address.

Select *Dynamic IP Address (automatically allocated)* the screen shown in [Figure 22](#) is displayed. Check all your settings and click *Apply*.

Manually setting the IP address



3Com recommends that you assign your Access Point a static IP address.

- 1 Select *Unit Configuration* and then select *Static IP Address (to be specified manually)*. The screen shown in [Figure 23](#) is displayed.

Figure 23 Unit Configuration Screen For Static IP Address

- 2 Enter the Access Point *IP Address* and *Subnet Mask* in the LAN Settings field. The default static IP address of the Access Point is 192.168.1.1.
- 3 If you want to use the Access Point as a DHCP Server, click in the *Enable* check box. See [“DHCP Server”](#) for more information about configuring the DHCP server.
- 4 Check all of your settings, and then click *Apply*.

DHCP Server



The DHCP server will give out addresses to both wired and wireless clients.



Before enabling the DHCP Server, ensure that there are no other DHCP servers running on your network.

If you want the Access Point to function as a DHCP server on your network, carry out the following:

- 1 Select *Unit Configuration* and then select *Static IP Address (to be specified manually)*. The screen shown in [Figure 23](#) is displayed.
- 2 Enter the IP address details as described in [“Manually setting the IP address”](#) and click *Enable* against *The Access Point acts as a DHCP Server*. The screen shown in [Figure 24](#).

Figure 24 DHCP Server Configuration Screen

The screenshot shows the 'LAN Settings' tab of the 'OfficeConnect® 11Mbps Wireless Access Point' configuration page. The left sidebar contains navigation links: Welcome, LAN Settings (selected), Wireless Settings, System Tools, Status and Logs, Support, and Feedback. A 'LOG OUT' button is at the bottom of the sidebar. The main content area has two tabs: 'Unit Configuration' and 'DHCP Clients List'. The 'LAN Settings' section includes a dropdown for 'IP Allocation Mode' set to 'Static IP address (to be specified manually)', and input fields for 'IP Address' (192.168.1.1) and 'Subnet Mask' (255.255.255.0). Below this is the 'DHCP Server Parameters' section, which has a checkbox 'The Access Point acts as DHCP Server' checked and an 'Auto Range' button. It also contains input fields for 'IP Pool Start Address', 'IP Pool End Address', 'Default Gateway' (0.0.0.0), 'Primary DNS Address' (0.0.0.0), and 'Secondary DNS Address' (0.0.0.0), each with an '(Optional)' label. On the right side of the configuration area are 'Help', 'Apply', and 'Cancel' buttons. At the bottom, the status is 'Ready'.

- 3 Clicking *Auto Range* automatically selects the largest range of addresses available for your network. Alternatively you can manually enter *Start* and *End* addresses for the IP address pool. The DHCP server supports up to a maximum of 253 addresses.
- 4 Enter any *Default Gateway* and *DNS* (Domain Name Server) addresses if required.
- 5 Check your settings and click *Apply*.

DHCP Clients List Figure 25 DHCP Clients List Screen

The screenshot shows the 'DHCP Clients List' tab of the 'OfficeConnect® 11Mbps Wireless Access Point' configuration page. The left sidebar is identical to the previous screen. The main content area has two tabs: 'Unit Configuration' and 'DHCP Clients List' (selected). It displays a table of DHCP clients. On the right side of the table are 'Help' and 'Refresh' buttons. At the bottom, the status is 'Ready'.

	IP Address	Host Name	MAC Address	Client Type
release	192.168.1.4	pc1	00-00-E8-22-28-0B	Wired
release	192.168.1.11	pc2	00-00-E8-23-52-4E	Wireless, 11Mbps
release	192.168.1.12	pc16	00-C0-4F-83-7E-42	Wireless, 2Mbps

The DHCP Clients List provides details on the devices that are connected to the LAN. The list is only created when the Access Point is set up as a DHCP server. For each device that is connected to the LAN, the IP address, Host Name, MAC address and Client Type of that device is displayed. As you connect more devices, the client list will grow to a maximum number of clients.

The *Release* button allows the lease time for the IP address that has been issued to a device to be cleared. The lease time is set at 12 hours. If a PC has been switched off, using the *Release* button would allow the 12 hour lease time to be cleared. The IP address would then be available for another device if there were no other IP addresses available.

As the IP address is fixed to a MAC address, then each particular computer will normally be issued with the same IP address. The only time that a PC will get a different IP address is if the DHCP server has run out of IP addresses.

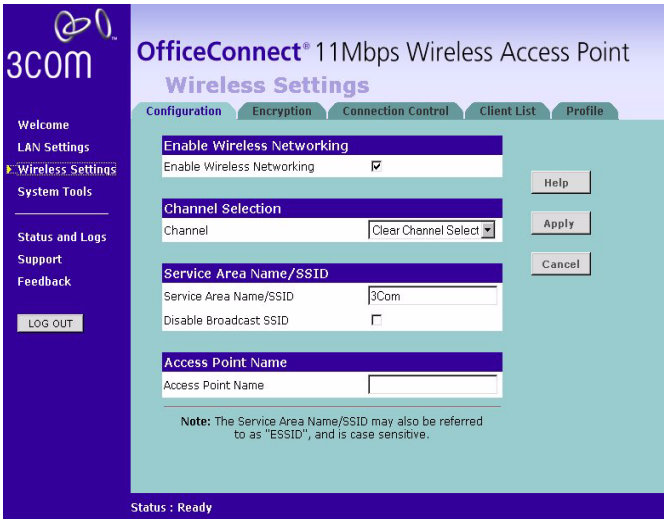
Wireless Settings



To improve the security of your wireless network, 3Com recommends that you:

1. *Change the SSID from its default value - see [page 39](#)*
2. *Enable Encryption - see [page 40](#)*
3. *Enable Connection Control - see [page 42](#)*

Configuration **Figure 26** Configuration Screen



Enable Wireless Networking

Allows you to enable/disable the wireless section of your LAN. When disabled, no wireless PCs can gain access to your Wired or Wireless LAN through this Access Point.

Channel Selection

The Channel Selector allows you to specify which Channel the Access Point will transmit and receive on. If someone else nearby is using the same Channel as you, there will be a reduction in the performance of your network. If this seems to be the case, you should select a different channel number. Usually the Wireless computers will scan to find the correct channel, but if they don't you must configure them to use the same Channel number as the Access Point.



Valid channels are country dependent. See ["Channels"](#) on [page 83](#) for a list of channels approved by each country.

Clear Channel Select allows the Access Point to automatically select the optimum channel when first powered on.

Service Area Name/SSID

This allows you to name your Wireless network. The field will accept any alphanumeric string and has a maximum length of 32 characters. Your Wireless computers must be configured with exactly the same name or you will not establish a connection. The Service Area Name may also be referred to as "ESSID" depending on your networking vendor. By default the Access Point uses the name "3Com". 3Com recommends that you change the default name.



In order that your wireless computers can connect to the Access Point, you must:

- *Use Infrastructure Mode not Adhoc Mode.*
- *Have the same Service Area Name as the Access Point.*
- *Use the same encryption type and keys as the Access Point.*
- *Ensure that the PC is included in the authorized Wireless PCs list if Connection Control is enabled. See [page 42](#).*

Disable Broadcast SSID

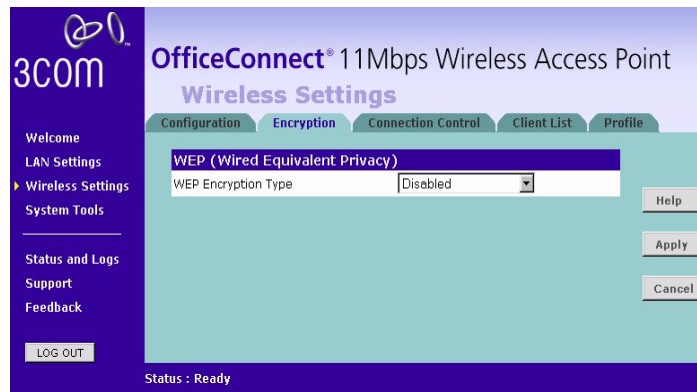
This feature can be used to improve the security of your wireless network. When the tickbox is checked, the Access Point will not broadcast the Service Area Name/SSID of your wireless network. This will prevent unauthorized clients from detecting your SSID and attempting to connect to your network.

If you have a wireless client that can detect all the available SSIDs in your area, your client will not list the Access Point SSID when this feature is enabled.

3Com recommends that you install your wireless network with this feature disabled and then enable it once you have set up the Access Point and wireless clients.

Access Point Name

This option allows you to name the Access Point. The field accepts any alphanumeric string upto a maximum of 32 characters. This option is useful if you have several Access Point units and want to be able to easily identify them. For example, you may name them *Marketing*, *Research*, *Admin*.

Encryption **Figure 27** Encryption Screen

Wired Equivalent Privacy or WEP allows you to encrypt the traffic between your Wireless PC and the Access Point. It is important to remember that with WEP disabled anyone with a Wireless PC can eavesdrop on your network. 3Com recommends that you get the network working with WEP disabled first and then enable it as the last step. This will simplify setting up your network.



If you enable WEP on the Access Point, you must reconfigure your wireless PCs to use exactly the same Encryption Type and Keys otherwise the devices will not understand each other.



WEP is for securing data transmitted through wireless communications between the Access Point and it's wireless clients. Enabling WEP has no security effect on data transmitted through wired (Ethernet) connections or through your connections to the Internet.

Wireless Encryption Type

There are two levels of encryption available, 64 bit (sometimes referred to as 40 bit) and 128 bit. 128 bit will result in a higher level of security, but may cause a slight decrease in performance. Use the *Wireless Encryption Type* box to select the desired level.

Encryption Keys

Figure 28 Encryption Keys Screen

3COM OfficeConnect® 11Mbps Wireless Access Point
Wireless Settings

Configuration Encryption Connection Control Client List Profile

WEP (Wired Equivalent Privacy)
WEP Encryption Type: 40bit/64 bit encryption

Encryption Key
Select key generation method: Manual Hex Key

Manual Hex Keys:	Active Transmit Key
Key 1: 1A 1b 1c 1d 1e	☒
Key 2: 1A 1b 1c 1d 1e	☐
Key 3: 1A 1b 1c 1d 1e	☐
Key 4: 1A 1b 1c 1d 1e	☐

Valid characters for "Key 1" to "Key 4" are '0-9' and 'A-F'

Note: The Keys must match those in the clients.

Status : Ready

A Key is a hexadecimal (0-9, A-F) number used to encrypt and decrypt the data. There can be up to 4 keys and each key can be as long as 26 digits. The Access Point also offers a number of methods for converting plain text into hex keys. The text is much easier to remember than hex keys but it relies on your wireless adapters also supporting this feature. Different manufacturers have developed different ways of converting plain text and so interoperability is not guaranteed. If you are experiencing difficulty, the Manual Hex Key method is supported by most vendors.

There are four methods available to generate the encryption keys:

- Manual Key Entry - This method allows you to manually enter hex keys. Virtually all manufacturers support this scheme. Enter a two digit hexadecimal number in every box. Hexadecimal numbers are formed from 0-9 and A-F.
- 3Com Encryption String - This method is supported by 3Com Wireless products. The string can contain any alphanumeric characters and must be between 6 and 30 characters long. A single string will automatically generate 4 unique keys for 64 or 128 bit WEP.
- ASCII - This method is supported by some adapter cards running under Windows XP. The string must be exactly 5 characters for 64 bit

WEP and 13 characters for 128 bit WEP. You must enter a separate string for each of the 4 Keys. You can leave a string blank provided this Key is not selected as the Active Transmit Key.

- **Passphrase** - This is another common method and similar to the 3Com Encryption string. In 64 bit WEP, the passphrase will generate 4 different keys. However, in 128 bit WEP, this method only generates 1 key which is replicated for all 4 keys. The passphrase can be up to 31 characters long and may contain any alphanumeric characters.

Select from the drop down list the key generation method you wish to use. If you have other wireless products choose the scheme that is compatible with these, then enter the appropriate information.



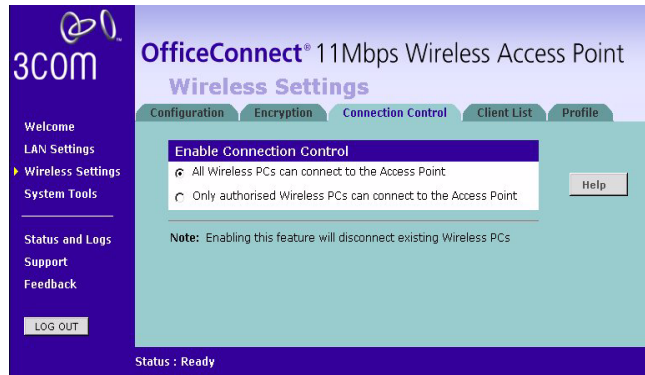
If you encounter any difficulty when you enable WEP ensure that you check that each key on your wireless computer is exactly the same as each key on your Access Point. In other words, Key number 1 on the Wireless computer must have the same Hex number as Key number 1 on the Access Point, Key 2 on the Wireless computer must match Key 2 on the Access Point and so on.

The *Active Transmit Key* selects which of the 4 Keys the Access Point uses when it transmits. You can change the selected key periodically to increase the security of your network.

Some wireless adapters have only one key available on their WEP configuration page. If this is the case ensure it is the same as Key 1 on the Access Point and that it is selected as the active transmit key.

Connection Control

This screen allows you to determine if all Wireless PCs or just authorised Wireless PCs can use the Access Point. Select Connection Control to display the screen shown in [Figure 29](#).

Figure 29 Connection Control Screen

A higher level of security can be achieved for your wireless network if you use both encryption and you specify only certain wireless computers can connect to the Access Point. By default, any wireless computer that has the same Service Area Name/SSID, channel and encryption settings as the Access Point can connect to it.

Select *Only Authorised Wireless PCs can connect to the Access Point* to enable and configure this feature.



If you enable this feature from a Wireless PC, it will automatically be added to the Authorised Wireless PC list.

Authorised Wireless PCs

Figure 30 Connection Control Detail Screen