Check Point Safe@Office

Internet Security Appliance

User Guide

Version 6.5

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Version 2, June 1991

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SAFETY PRECAUTIONS

Carefully read the Safety Instructions the Installation and Operating Procedures provided in this User's Guide before attempting to install or operate the appliance. Failure to follow these instructions may result in damage to equipment and/or personal injuries.

- Before cleaning the appliance, unplug the power cord. Use only a soft cloth dampened with water for cleaning.
- When installing the appliance, ensure that the vents are not blocked.
- Do not place this product on an unstable surface or support. The product may fall, causing serious injury to a child or adult, as well as serious damage to the product.
- Do not use the appliance outdoors.
- Do not expose the appliance to liquid or moisture.
- Do not expose the appliance to extreme high or low temperatures.
- Do not disassemble or open the appliance. Failure to comply will void the warranty.
- Do not use any accessories other than those approved by Check Point. Failure to do so may result in loss of performance, damage to the product, fire, electric shock or injury, and will void the warranty.
- Route power supply cords where they are not likely to be walked on or pinched by items placed on or against them. Pay particular attention to cords where they are attached to plugs and convenience receptacles, and examine the point where they exit the unit.
- Do not connect or disconnect power supply cables and data transmission lines during thunderstorms.
- Do not overload wall outlets or extension cords, as this can result in a risk of fire or electric shock. Overloaded AC outlets, extension cords, frayed power cords, damaged or cracked wire insulation, and broken plugs are dangerous. They may result in a shock or fire hazard. Periodically examine the cord, and if its appearance indicates damage or deteriorated insulation, have it replaced by your service technician.
- If the unit or any part of it is damaged, disconnect the power plug and inform the responsible service personnel. Non-observance may result in damage to the router.

POWER ADAPTER

- Operate this product only from the type of power source indicated on the product’s marking label. If you are not sure of the type of power supplied to your home, consult your dealer or local power company.
- Use only the power supply provided with your product. Check whether the device’s set supply voltage is the same as the local supply voltage.
- To reduce risk of damage to the unit, remove it from the outlet by holding the power adapter rather than the cord.

SECURITY DISCLAIMER

The appliance provides your office network with the highest level of security. However, no single security product can provide you with absolute protection against a determined effort to break into your system. We recommend using additional security measures to secure highly valuable or sensitive information.

Contents

About This Guide

To make finding information in this manual easier, some types of information are marked with special symbols or formatting.

Boldface type is used for command and button names.

Note: Notes are denoted by indented text and preceded by the Note icon.

Warning: Warnings are denoted by indented text and preceded by the Warning icon.

Each task is marked with an icon indicating the Safe@Office product required to perform the task, as follows:

If this icon appears...	You can perform the task using these products...
500	Safe@Office 500 or Safe@Office 500W, with or without the Power Pack
500W	Safe@Office 500W *only*, with or without the Power Pack
Power Pack	Safe@Office 500 or Safe@Office 500W, with the Power Pack *only*

Chapter 1

Introduction

This chapter introduces the Check Point Safe@Office appliance and this guide.

This chapter includes the following topics:

About Your Check Point Safe@Office Appliance

The Check Point Safe@Office 500 appliance is a unified threat management (UTM) appliance that enables secure high-speed Internet access from the office. Developed and supported by SofaWare Technologies, an affiliate of Check Point Software Technologies, the worldwide leader in securing the Internet, the Safe@Office 500 product family includes both wired wireless models. Safe@Office 500 ADSL includes an integrated ADSL modem. The Safe@Office firewall, based on the world-leading Check Point Embedded NGX Stateful Inspection technology, inspects and filters all incoming and outgoing traffic, blocking all unauthorized traffic.

The Safe@Office appliance also allows sharing your Internet connection among several PCs or other network devices, enabling advanced office networking and saving the cost of purchasing static IP addresses.

With the Safe@Office appliance, you can subscribe to additional security services available from select service providers, including firewall security and software updates, Antivirus, Web Filtering, reporting, VPN management, and Dynamic DNS. By supporting integrated VPN capabilities, the Safe@Office appliance allows teleworkers and road warriors to securely connect to the office network, and enables secure interconnection of branch offices.

Safe@Office 500 Product Family

The Safe@Office 500 series includes the following hardware models:

- Safe@Office 500 Internet Security Appliance
- Safe@Office 500W Wireless Security Appliance

You can upgrade your Safe@Office appliance to include additional features without replacing the hardware by installing the Safe@Office 500 Power Pack, and you can increase the number of licensed users by installing node upgrades. Contact your reseller for more details.

Safe@Office Features and Compatibility

Connectivity

The Safe@Office 500 series includes the following features:

- LAN ports: 4-ports 10/100 Mbps Fast Ethernet switch
- WAN port:
- Either:
  1. *a.* 10/100 Mbps Fast Ethernet *OR:*
  2. b. ADSL Port
- DMZ/WAN2 Port: 10/100 Mbps Fast Ethernet
- Serial (RS232) port for console access and dialup modem connection
- Supported Internet connection methods: Static IP, DHCP Client, Cable Modem, PPTP Client, PPPoE Client, Telstra BPA login, Dialup
- Concurrent firewall connections: 8,000
- DHCP server, client, and relay
- MAC cloning
- Static NAT
- Static routes and source routes
- Ethernet cable type recognition
- Backup Internet connection
- Dead Internet Connection Detection (DCD)
- Traffic Monitoring
- Traffic Shaping
- VLAN Support (requires Power Pack)
- Dynamic Routing (requires Power Pack)

The Safe@Office 500W includes the following additional features:

- Wireless LAN interface with dual diversity antennas supporting up to 108 Mbps (Super G) and Extended Range (XR)
- Integrated USB print server
- Wireless QoS (WMM)

Firewall

The Safe@Office 500 series includes the following features:

- Check Point Firewall-1 Embedded NGX firewall with Application Intelligence
- Intrusion Detection and Prevention using Check Point SmartDefense
- Network Address Translation (NAT)
- Three preset security policies
- Anti-spoofing
- Voice over IP (H.323) support
- Instant messenger blocking/monitoring
- P2P file sharing blocking/monitoring

VPN

The Safe@Office 500 series includes the following features:

- Remote Access VPN Server with OfficeMode and RADIUS support
- Remote Access VPN Client
- Site to Site VPN Gateway
- IPSEC VPN pass-through
- Algorithms: AES/3DES/DES, SHA1/MD5
- Hardware Based Secure RNG (Random Number Generator)
- IPSec NAT traversal (NAT-T)
- Route-based VPN
- Backup VPN gateways

Management

The Safe@Office 500 series includes the following features:

- Management via HTTP, HTTPS, SSH, SNMP, Serial CLI
- Central Management: SMP
- NTP automatic time setting
- TFTP Rapid Deployment
- Local diagnostics tools: Ping, WHOIS, Packet Sniffer, VPN Tunnel Monitor, Connection Table Monitor, Wireless Monitor, Active Computers Display, Local Logs

Optional Security Services

The following subscription security services are available to Safe@Office owners by connecting to a Service Center:

- Firewall Security and Software Updates
- Web Filtering
- Email Antivirus and Antispam Protection
- VStream Embedded Antivirus Updates
- Dynamic DNS Service
- VPN Management
- Security Reporting
- Vulnerability Scanning Service

Power Pack Features

The table below describes the differences between the standard Safe@Office 500 models and Safe@Office 500 models with the Power Pack installed.

Feature	Safe@Office 500/500W	Safe@Office 500/500W with Power Pack
High Availability	—	✓
Traffic Shaper	Basic	Advanced
DiffServ Tagging	—	✓
Dynamic Routing	—	✓
Firewall/VPN Throughput (Mbps)	100/20	150/30

Feature	Safe@Office 500/500W	Safe@Office 500/500W with Power Pack
Secure Hotspot	—	✓
VLAN (Port/Tag-based)	—	✓
VPN Throughput	20 Mbps	30 Mbps
Site-to-Site VPN	2 tunnels	15 tunnels
Site-to-Site VPN (Managed) *	10 tunnels	100 tunnels
Included VPN-1 SecuRemote client Licenses	5 users	25 users

* When managed by SofaWare Security Management Portal (SMP).

Package Contents

The Safe@Office 500 series package includes the following:

- Safe@Office Internet Security Appliance
- Power adapter
- CAT5 Straight-through Ethernet cable
- Getting Started Guide
- This Users Guide

The Safe@Office 500W also includes:

- Two antennas
- Wall mounting kit, including two plastic conical anchors and two cross-head screws
- USB extension cable

Network Requirements

- A broadband Internet connection via cable or DSL modem with Ethernet interface (RJ-45)
- 10BaseT or 100BaseT Network Interface Card installed on each computer
- TCP/IP network protocol installed on each computer
- Internet Explorer 5.0 or higher, or Netscape Navigator 4.7 and higher
- CAT 5 STP (Category 5 Shielded Twisted Pair) Straight Through Ethernet cable for each attached device

Note: The Safe@Office appliance automatically detects cable types, so you can use either a straight-through or crossed cable, when cascading an additional hub or switch to the Safe@Office appliance.

Note: For optimal results, it is highly recommended to use either Microsoft Internet Explorer 5.5 or higher, or Mozilla Firefox 1.0 or higher.

- When using Safe@Office 500W, an 802.11b, 802.11g or 802.11 Super G wireless card installed on each wireless station

Getting to Know Your Safe@Office 500 Appliance

500

Rear Panel

All physical connections (network and power) to the Safe@Office appliance are made via the rear panel of your Safe@Office appliance.

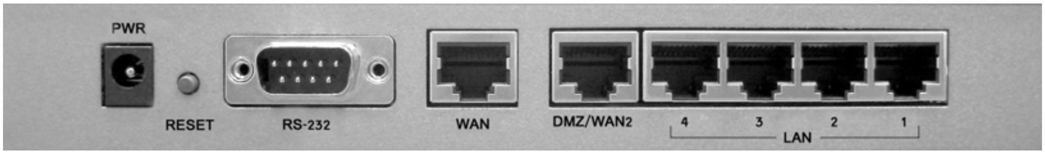


Figure 1: Safe@Office 500 SBX-166LHGE-2 Appliance Rear Panel Items

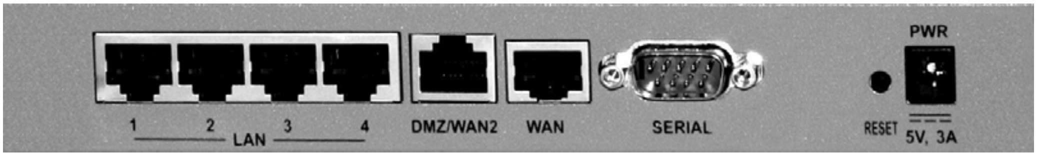


Figure 2: Safe@Office 500 SBX-166LHGE-4 Appliance Rear Panel Items

The following table lists the Safe@Office 500 appliance's rear panel elements.

Table 1: Safe@Office 500 Appliance Rear Panel Elements

Label	Description
PWR	A power jack used for supplying power to the unit. Connect the supplied power adapter to this jack.

Label	Description
RESET	A button used for rebooting the Safe@Office appliance or resetting the Safe@Office appliance to its factory defaults. You need to use a pointed object to press this button. • Short press. Reboots the Safe@Office appliance • Long press (7 seconds). Resets the Safe@Office appliance to its factory defaults, and resets your firmware to the version that shipped with the Safe@Office appliance. This results in the loss of all security services and passwords and reverting to the factory default firmware. You will have to re-configure your Safe@Office appliance. Do not reset the unit without consulting your system administrator.
RS-232 / Serial	A serial port used for connecting computers in order to access the Safe@Office CLI (Command Line Interface), or for connecting an external dialup modem
WAN	Wide Area Network: An Ethernet port (RJ-45) used for connecting your cable or xDSL modem, or for connecting a hub when setting up more than one Internet connection
DMZ/ WAN2	A dedicated Ethernet port (RJ-45) used to connect a DMZ (Demilitarized Zone) computer or network. Alternatively, can serve as a secondary WAN port , or as a VLAN trunk.
LAN 1-4	Local Area Network switch: Four Ethernet ports (RJ-45) used for connecting computers or other network devices

Front Panel

The Safe@Office 500 appliance includes several status LEDs that enable you to monitor the appliance's operation.

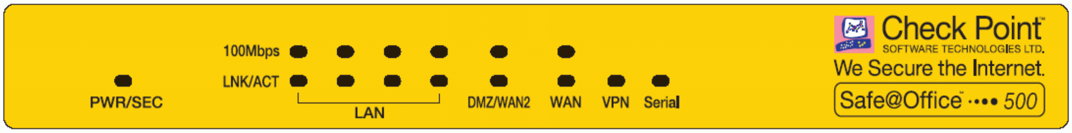


Figure 3: Safe@Office 500 Appliance Front Panel

For an explanation of the Safe@Office 500 appliance's status LEDs, see the table below.

Table 2: Safe@Office 500 Appliance Status LEDs

LED	State	Explanation
PWR/SEC	Off	Power off
	Flashing quickly (Green)	System boot-up
	Flashing slowly (Green)	Establishing Internet connection
	On (Green)	Normal operation
	Flashing (Red)	Hacker attack blocked
	On (Red)	Error
LAN 1-4/ WAN/ DMZ/WAN2	LINK/ACT Off, 100 Off	Link is down
	LINK/ACT On, 100 Off	10 Mbps link established for the corresponding port

LED	State	Explanation
	LINK/ACT On, 100 On	100 Mbps link established for the corresponding port
	LNK/ACT Flashing	Data is being transmitted/received
VPN	Flashing (Green)	VPN port in use
Serial	Flashing (Green)	Serial port in use

Getting to Know Your Safe@Office 500W Appliance

500W

Rear Panel

All physical connections (network and power) to the Safe@Office appliance are made via the rear panel of your Safe@Office appliance.

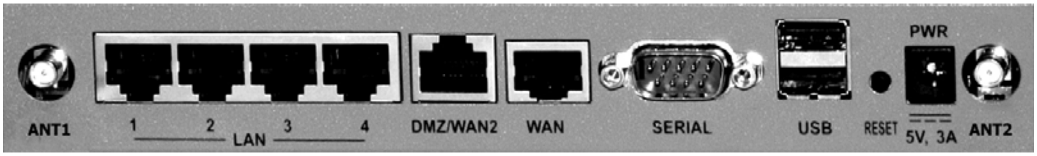


Figure 4: Safe@Office 500W Appliance Rear Panel Items

The following table lists the Safe@Office 500W appliance's rear panel elements.

Table 3: Safe@Office 500W Appliance Rear Panel Elements

Label	Description
PWR	A power jack used for supplying power to the unit. Connect the supplied power adapter to this jack.

Label	Description
RESET	A button used for rebooting the Safe@Office appliance or resetting the Safe@Office appliance to its factory defaults. You need to use a pointed object to press this button. • Short press. Reboots the Safe@Office appliance • Long press (7 seconds). Resets the Safe@Office appliance to its factory defaults, and resets your firmware to the version that shipped with the Safe@Office appliance. This results in the loss of all security services and passwords and reverting to the factory default firmware. You will have to re-configure your Safe@Office appliance. Do not reset the unit without consulting your system administrator.
USB	Two USB 2.0 ports used for connecting USB-based printers
RS232	A serial (RS-232) port used for connecting computers in order to access the Safe@Office CLI (Command Line Interface), or for connecting an external dialup modem
WAN	Wide Area Network: An Ethernet port (RJ-45) used for connecting your cable or xDSL modem, or for connecting a hub when setting up more than one Internet connection
DMZ/ WAN2	A dedicated Ethernet port (RJ-45) used to connect a DMZ (Demilitarized Zone) computer or network. Alternatively, can serve as a secondary WAN port , or as a VLAN trunk.
LAN 1-4	Local Area Network switch: Four Ethernet ports (RJ-45) used for connecting computers or other network devices
ANT 1/ ANT 2	Antenna connectors, used to connect the supplied wireless antennas

Front Panel

The Safe@Office 500W appliance includes several status LEDs that enable you to monitor the appliance's operation.

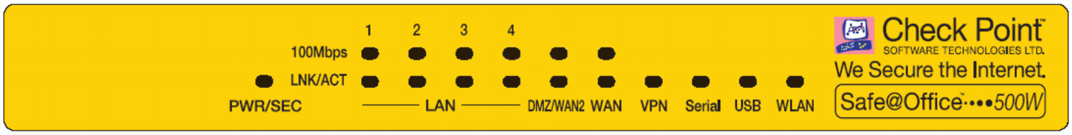


Figure 5: Safe@Office 500W Appliance Front Panel

For an explanation of the Safe@Office 500W appliance's status LEDs, see the table below.

Table 4: Safe@Office 500W Appliance Status LEDs

LED	State	Explanation
PWR/SEC	Off	Power off
	Flashing quickly (Green)	System boot-up
	Flashing slowly (Green)	Establishing Internet connection
	On (Green)	Normal operation
	Flashing (Red)	Hacker attack blocked
	On (Red)	Error
	Flashing (Orange)	Software update in progress
LAN 1-4/ WAN/ DMZ/WAN2	LINK/ACT Off, 100 Off	Link is down
	LINK/ACT On, 100 Off	10 Mbps link established for the corresponding port

LED	State	Explanation
	LINK/ACT On, 100 On	100 Mbps link established for the corresponding port
	LNK/ACT Flashing	Data is being transmitted/received
VPN	Flashing (Green)	VPN port in use
Serial	Flashing (Green)	Serial port in use
USB	Flashing (Green)	USB port in use
WLAN	Flashing (Green)	WLAN in use

Contacting Technical Support

If there is a problem with your Safe@Office appliance, see http://www.sofaware.com/support.

You can also download the latest version of this guide from the site.

Chapter 2

Installing and Setting up the Safe@Office Appliance

This chapter describes how to properly set up and install your Safe@Office appliance in your networking environment.

This chapter includes the following topics:

Before You Install the Safe@Office Appliance

Prior to connecting and setting up your Safe@Office appliance for operation, you must do the following:

- Check if TCP/IP Protocol is installed on your computer.
- Check your computer’s TCP/IP settings to make sure it obtains its IP address automatically.

Refer to the relevant section in this guide in accordance with the operating system that runs on your computer. The sections below will guide you through the TCP/IP setup and installation process.

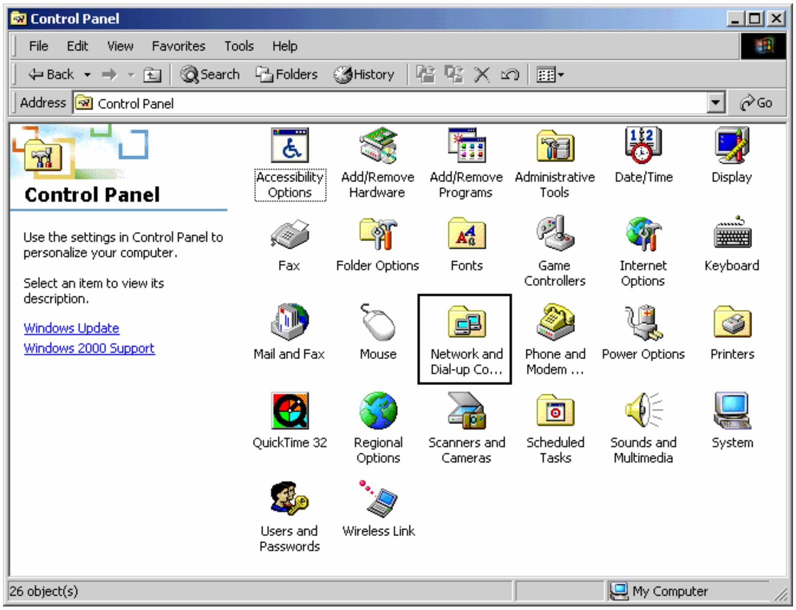
Windows 2000/XP

Note: While Windows XP has an "Internet Connection Firewall" option, it is recommended to disable it if you are using a Safe@Office appliance, since the Safe@Office appliance offers better protection.

Checking the TCP/IP Installation

2. Click Start > Settings > Control Panel.

   The Control Panel window appears.

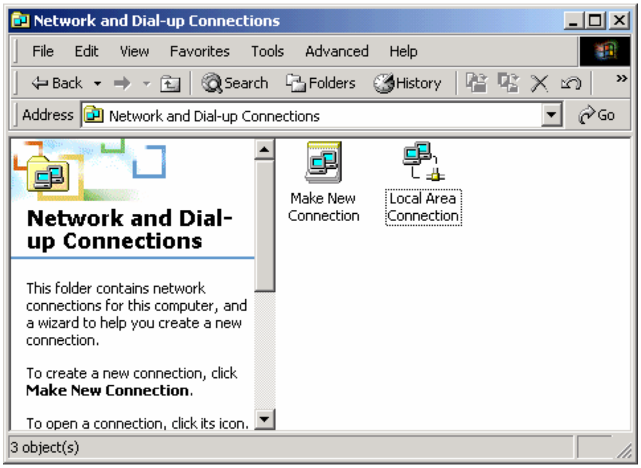


Use the settings in Control Panel to personalize your computer.

Select an item to view its description.

3. Double-click the Network and Dial-up Connections icon.

The **Network and Dial-up Connections** window appears.



Network and Dial-up Connections

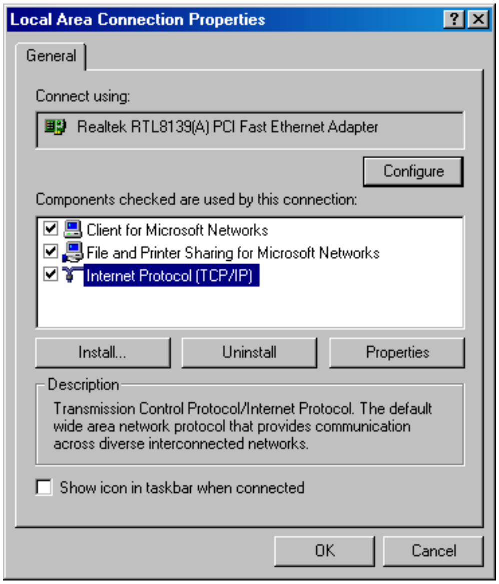
This folder contains network connections for this computer, and a wizard to help you create a new connection.

To create a new connection, click **Make New Connection**.

To open a connection, click its icon.

4. Right-click the Local Area Connection icon and select **Properties** from the pop-up menu that opens.

The **Local Area Connection Properties** window appears.



Local Area Connection Properties

General

Connect using:

Realtek RTL8139(A) PCI Fast Ethernet Adapter

Components checked are used by this connection:

☑ Client for Microsoft Networks
☑ File and Printer Sharing for Microsoft Networks
☑ Internet Protocol (TCP/IP)

Description

Transmission Control Protocol/Internet Protocol. The default wide area network protocol that provides communication across diverse interconnected networks.

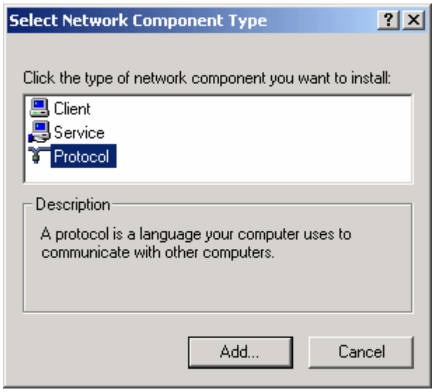
☐ Show icon in taskbar when connected

5. In the above window, check if **TCP/IP** appears in the components list and if it is properly configured with the Ethernet card, installed on your computer. If **TCP/IP** does not appear in the **Components** list, you must install it as described in the next section.

Installing TCP/IP Protocol

1. In the Local Area Connection Properties window click Install....

   The Select Network Component Type window appears.



Select Network Component Type

Click the type of network component you want to install:

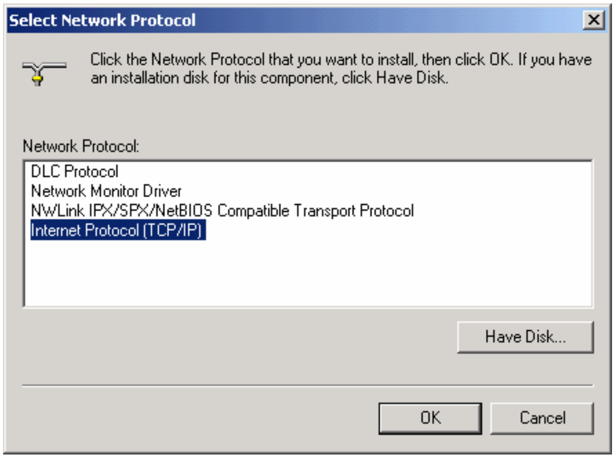
- Client
- Service
- Protocol

Description

A protocol is a language your computer uses to communicate with other computers.

2. Choose Protocol and click Add.

   The Select Network Protocol window appears.



Select Network Protocol

Click the Network Protocol that you want to install, then click OK. If you have an installation disk for this component, click Have Disk.

Network Protocol:

- DLC Protocol
- Network Monitor Driver
- NWLink IPX/SPX/NetBIOS Compatible Transport Protocol
- Internet Protocol (TCP/IP)

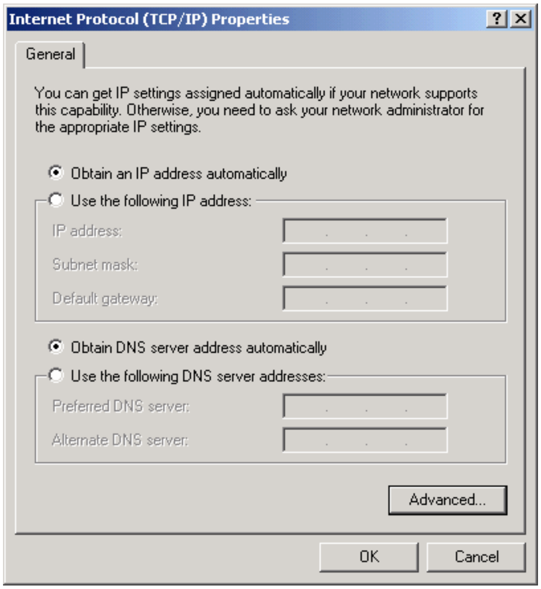
3. Choose Internet Protocol (TCP/IP) and click OK.

   TCP/IP protocol is installed on your computer.

TCP/IP Settings

1. In the **Local Area Connection Properties** window double-click the **Internet Protocol (TCP/IP)** component, or select it and click **Properties.**

   The **Internet Protocol (TCP/IP) Properties** window opens.



Internet Protocol (TCP/IP) Properties

General

You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.

● Obtain an IP address automatically

○ Use the following IP address:

IP address: . . .

Subnet mask: . . .

Default gateway: . . .

● Obtain DNS server address automatically

○ Use the following DNS server addresses:

Preferred DNS server: . . .

Alternate DNS server: . . .

2. Click the **Obtain an IP address automatically** radio button.

Note: Normally, it is not recommended to assign a static IP address to your PC but rather to obtain an IP address automatically. If for some reason you need to assign a static IP address, select **Specify an IP address**, type in an IP address in the range of 192.168.10.129-254, enter 255.255.255.0 in the Subnet Mask field, and click OK to save the new settings.

(Note that 192.168.10 is the default value, and it may vary if you changed it in the **My Network page.**)

3. Click the **Obtain DNS server address automatically** radio button.
4. Click **OK** to save the new settings.

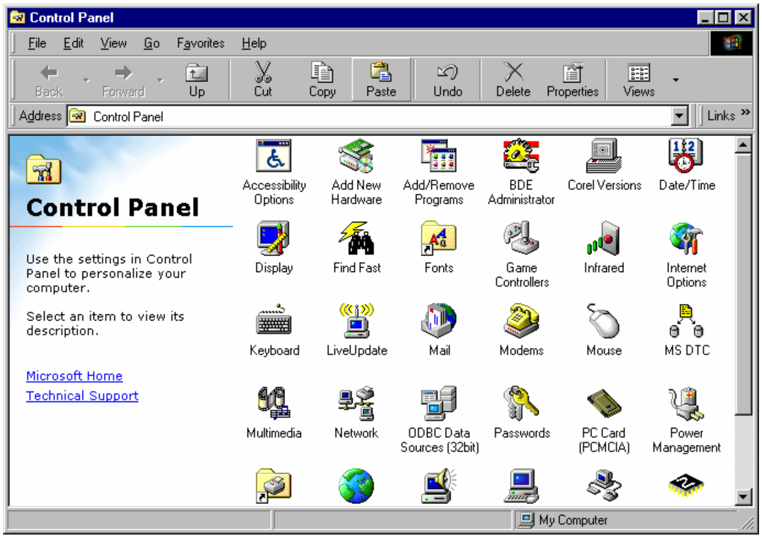
   Your computer is now ready to access your Safe@Office appliance.

Windows 98/Millennium

Checking the TCP/IP Installation

1. Click Start > Settings > Control Panel.

   The Control Panel window appears.

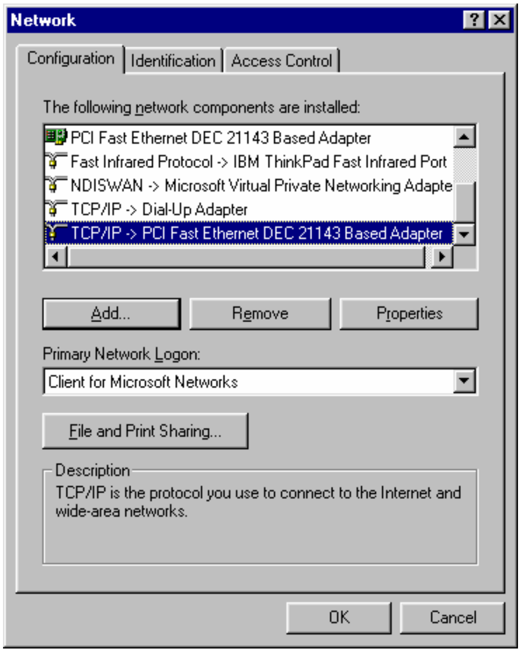


Use the settings in Control Panel to personalize your computer.

Select an item to view its description.

2. Double-click the Network icon.

The Network window appears.



The following network components are installed:

- PCI Fast Ethernet DEC 21143 Based Adapter
- Fast Infrared Protocol -> IBM ThinkPad Fast Infrared Port
- NDISWAN -> Microsoft Virtual Private Networking Adapte
- TCP/IP -> Dial-Up Adapter
- TCP/IP -> PCI Fast Ethernet DEC 21143 Based Adapter

Primary Network Logon: Client for Microsoft Networks

Description
TCP/IP is the protocol you use to connect to the Internet and wide-area networks.

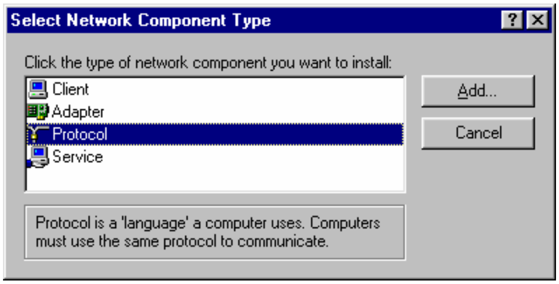
3. In the **Network** window, check if **TCP/IP** appears in the network components list and if it is already configured with the Ethernet card, installed on your computer.

Installing TCP/IP Protocol

Note: If TCP/IP is already installed and configured on your computer skip this section and move directly to TCP/IP Settings.

1. In the **Network** window, click **Add**.

The **Select Network Component Type** window appears.



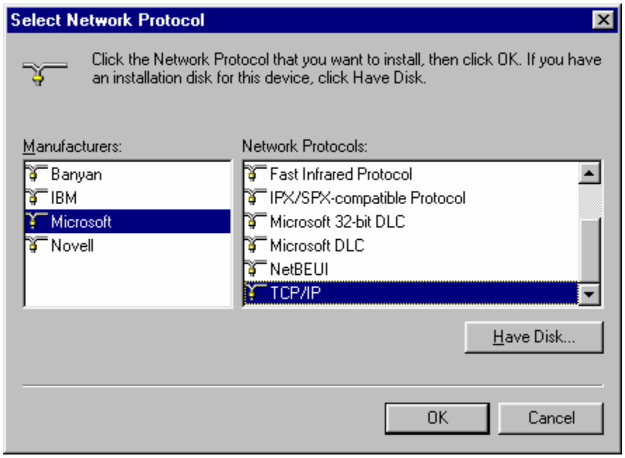
Select Network Component Type

Click the type of network component you want to install:

Protocol is a 'language' a computer uses. Computers must use the same protocol to communicate.

2. Choose **Protocol** and click **Add**.

   The **Select Network Protocol** window appears.



Select Network Protocol

Click the Network Protocol that you want to install, then click OK. If you have an installation disk for this device, click Have Disk.

Manufacturers: Microsoft

Network Protocols: TCP/IP

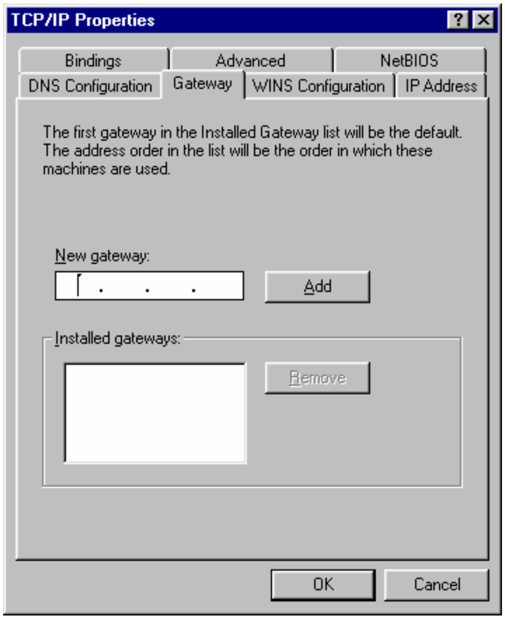
3. In the **Manufacturers** list choose **Microsoft**, and in the **Network Protocols** list choose **TCP/IP**.
4. Click **OK**.

   If Windows asks for original Windows installation files, provide the installation CD and relevant path when required (e.g. D:\win98)
5. Restart your computer if prompted.

TCP/IP Settings

Note: If you are connecting your Safe@Office appliance to an existing LAN, consult your network manager for the correct configurations.

1. In the **Network** window, double-click the **TCP/IP** service for the Ethernet card, which has been installed on your computer (e.g. TCP/IP -> PCI Fast Ethernet DEC 21143 Based Adapter).
   The **TCP/IP Properties** window opens.

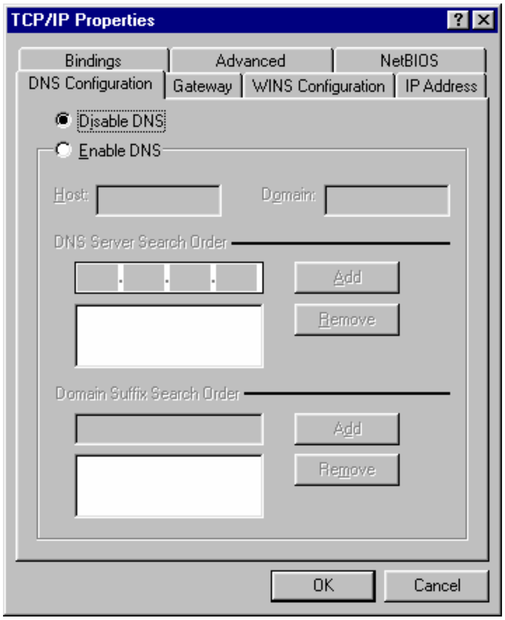


TCP/IP Properties

The first gateway in the Installed Gateway list will be the default. The address order in the list will be the order in which these machines are used.

2. Click the **Gateway** tab, and remove any installed gateways.

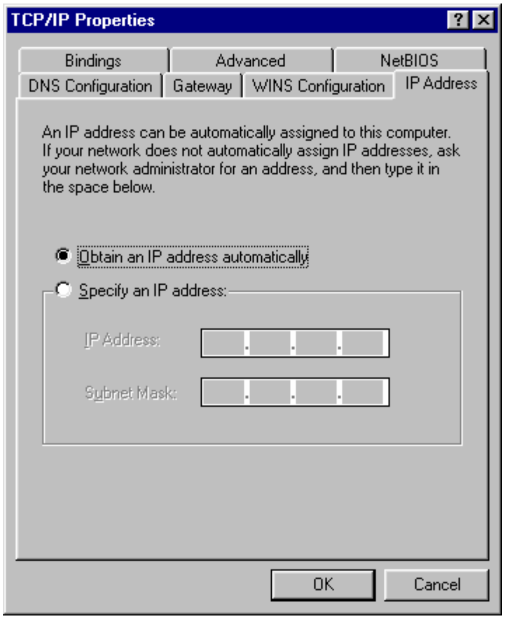
3. Click the **DNS Configuration** tab, and click the **Disable DNS** radio button.



● Disable DNS

○ Enable DNS

4. Click the **IP Address** tab, and click the **Obtain an IP address automatically** radio button.



An IP address can be automatically assigned to this computer. If your network does not automatically assign IP addresses, ask your network administrator for an address, and then type it in the space below.

● Obtain an IP address automatically

○ Specify an IP address:

Note: Normally, it is not recommended to assign a static IP address to your PC but rather to obtain an IP address automatically. If for some reason you need to assign a static IP address, select **Specify an IP address**, type in an IP address in the range of 192.168.10.129-254, enter 255.255.255.0 in the Subnet Mask field, and click OK to save the new settings.

(Note that 192.168.10 is the default value, and it may vary if you changed it in the My Network page.)

5. Click **Yes** when prompted for “**Do you want to restart your computer?**”.

   Your computer restarts, and the new settings to take effect.

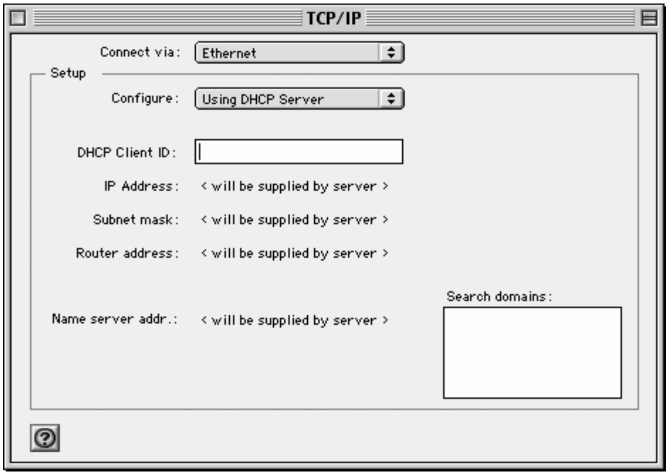
   Your computer is now ready to access your Safe@Office appliance.

Mac OS

Use the following procedure for setting up the TCP/IP Protocol.

1. Choose Apple Menus -> Control Panels -> TCP/IP.

   The TCP/IP window appears.

   TCP/IP

   Connect via: Ethernet

   Setup

   Configure: Using DHCP Server

   DHCP Client ID:

   IP Address: < will be supplied by server >

   Subnet mask: < will be supplied by server >

   Router address: < will be supplied by server >

   Name server addr.: < will be supplied by server >

   Search domains:

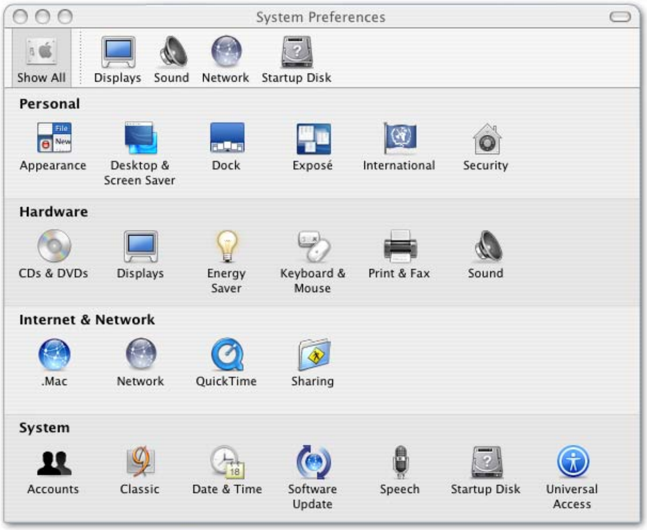
2. Click the Connect via drop-down list, and select Ethernet.
3. Click the Configure drop-down list, and select Using DHCP Server.
4. Close the window and save the setup.

Mac OS-X

Use the following procedure for setting up the TCP/IP Protocol.

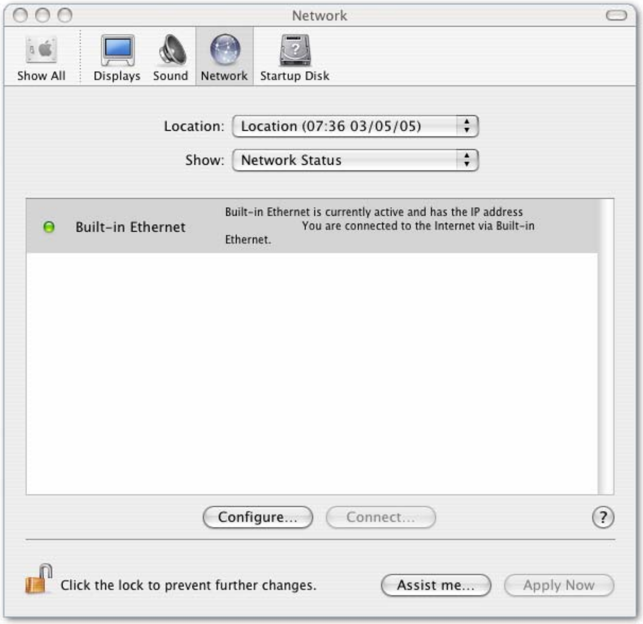
1. Choose Apple -> System Preferences.

   The System Preferences window appears.



2. Click Network.

   The Network window appears.



Location: Location (07:36 03/05/05)

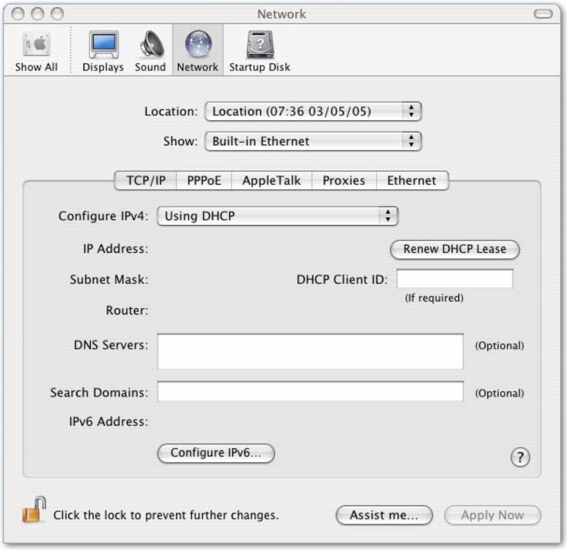
Show: Network Status

Built-in Ethernet — Built-in Ethernet is currently active and has the IP address You are connected to the Internet via Built-in Ethernet.

Click the lock to prevent further changes.

3. Click **Configure.**

TCP/IP configuration fields appear.



Location: Location (07:36 03/05/05)

Show: Built-in Ethernet

Configure IPv4: Using DHCP

4. Click the **Configure IPv4** drop-down list, and select **Using DHCP**.
5. Click **Apply Now**.

Wall Mounting the Appliance

500W

If desired, you can mount your Safe@Office 500W appliance on the wall.

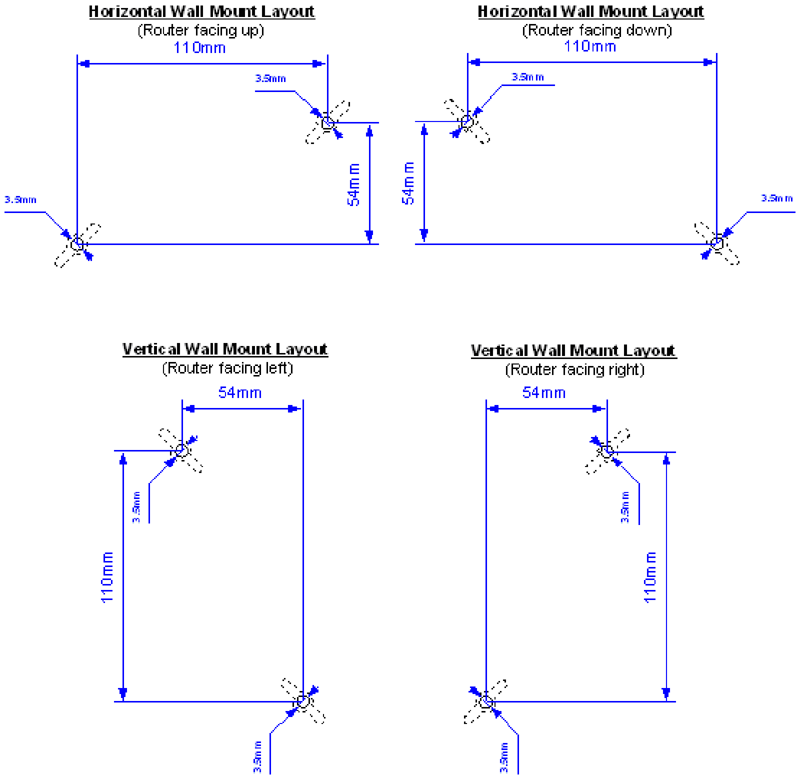
To mount the Safe@Office appliance on the wall

1. Decide where you want to mount your Safe@Office appliance.
2. Decide on the mounting orientation.

   You can mount the appliance on the wall facing up, down, left, or right.

Note: Mounting the appliance facing downwards is not recommended, as dust might accumulate in unused ports.

3. Mark two drill holes on the wall, in accordance with the following sketch:



4. Drill two 3.5 mm diameter holes, approximately 25 mm deep.

5. Insert two plastic conical anchors into the holes.

Note: The conical anchors you received with your Safe@Office appliance are suitable for concrete walls. If you want to mount the appliance on a plaster wall, you must use anchors that are suitable for plaster walls.

6. Insert the two screws you received with your Safe@Office appliance into the plastic conical anchors, and turn them until they protrude approximately 5 mm from the wall.

7. Align the holes on the Safe@Office appliance's underside with the screws on the wall, then push the appliance in and down.

   Your Safe@Office appliance is wall mounted. You can now connect it to your computer. See ***Network Installation*** on page 37.

Securing the Appliance against Theft

500W

The Safe@Office 500W features a security slot to the rear of the right panel, which enables you to secure your appliance against theft, using an anti-theft security device.

Note: Anti-theft security devices are available at most computer hardware stores.

This procedure explains how to install a looped security cable on your appliance. A looped security cable typically includes the parts shown in the diagram below.

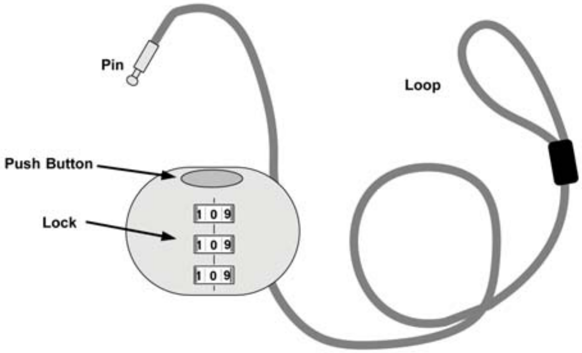


Figure 6: Looped Security Cable

While these parts may differ between devices, all looped security cables include a bolt with knobs, as shown in the diagram below:

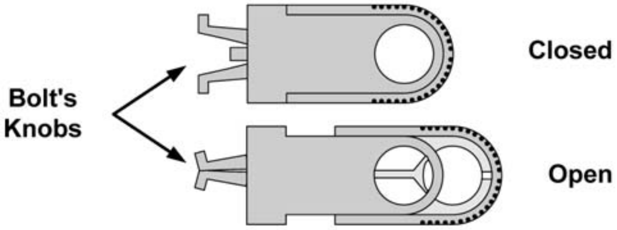


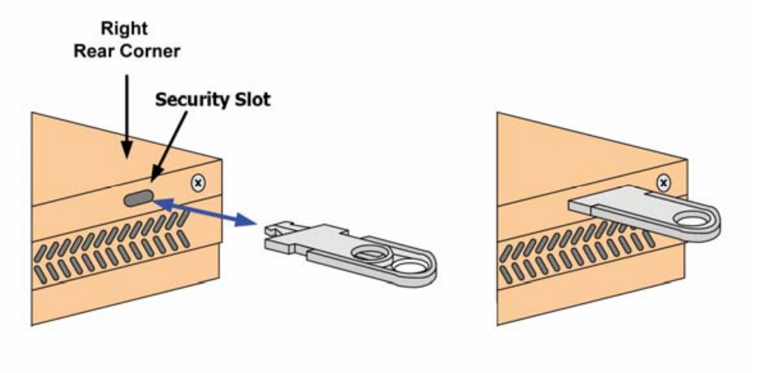
Figure 7: Looped Security Cable Bolt

The bolt has two states, Open and Closed, and is used to connect the looped security cable to the appliance's security slot.

To install an anti-theft device on the Safe@Office appliance

1. If your anti-theft device has a combination lock, set the desired code, as described in the documentation that came with your device.
2. Connect the anti-theft device's loop to any sturdy mounting point, as described in the documentation that came with your device.
3. Slide the anti-theft device's bolt to the Open position.

4. Insert the bolt into the Safe@Office appliance's security slot, then slide the bolt to the Closed position until the the bolts holes are aligned.



5. Thread the anti-theft device's pin through the bolt’s holes, and insert the pin into the main body of the anti-theft device, as described in the documentation that came with your device.

Network Installation

1. Verify that you have the correct cable type.

   For information, see Network Requirements.

2. Connect the LAN cable:

   - Connect one end of the Ethernet cable to one of the LAN ports at the back of the unit.
   - Connect the other end to PCs, hubs, or other network devices.

3. Connect the WAN cable:

   - Connect one end of the Ethernet cable to the WAN port at the back of the unit.
   - Connect the other end of the cable to a Cable Modem, xDSL modem or office network.

4. Connect the power adapter to the power socket, labeled PWR, at the back of the Safe@Office appliance.

5. Plug the power adapter into the wall electrical outlet.

Warning: The Safe@Office appliance power adapter is compatible with either 100, 120 or 230 VAC input power. Verify that the wall outlet voltage is compatible with the voltage specified on your power adapter. Failure to observe this warning may result in injuries or damage to equipment.

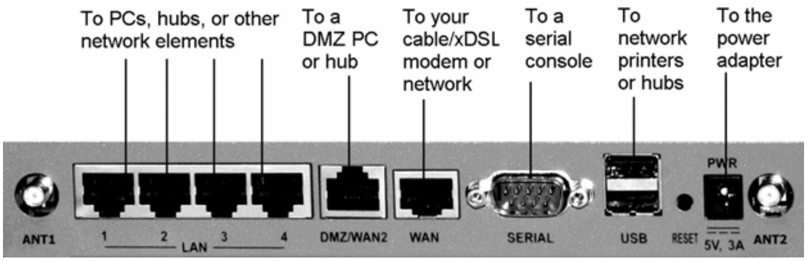


Figure 8: Typical Connection Diagram

6. In wireless models, prepare the Safe@Office appliance for a wireless connection:

   a. Connect the antennas that came with your Safe@Office appliance to the ANT1 and ANT2 antenna connectors in the appliance's rear panel.

   b. Bend the antennas at the hinges, so that they point upwards.

7. In models with a print server, you can connect network printers as follows:

   a. Connect one end of a USB cable to a USB port at the back of the unit.

      If needed, you can use the provided USB extension cord.

   b. Connect the other end to a printer or a USB 2.0 hub.

⚠ Warning: Verify that the USB devices' power requirement does not exceed the appliance's USB power supply capabilities. Failure to observe this warning may cause damage to the appliance and void the warranty.

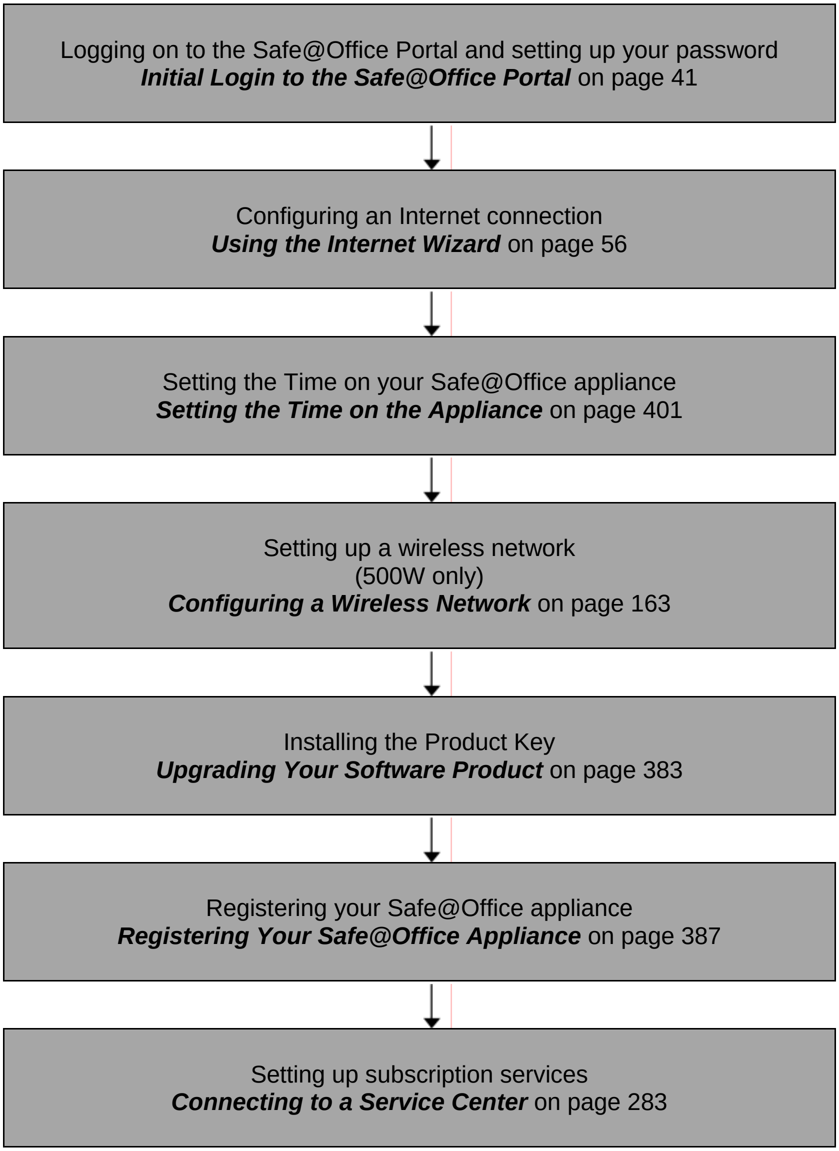
For information on setting up network printers, see ***Setting up Network Printers*** on page 428.

Setting Up the Safe@Office Appliance

500

After you have installed the Safe@Office appliance, you must set it up using the steps shown below.

When setting up your Safe@Office appliance for the first time after installation, these steps follow each other automatically. After you have logged on and set up your password, the Safe@Office Setup Wizard automatically opens and displays the dialog boxes for configuring your Internet connection. After you have configured your Internet connection, the Setup Wizard automatically displays the dialog boxes for registering your Safe@Office appliance. If desired, you can exit the Setup Wizard and perform each of these steps separately.



Logging on to the Safe@Office Portal and setting up your password
Initial Login to the Safe@Office Portal on page 41

Configuring an Internet connection
Using the Internet Wizard on page 56

Setting the Time on your Safe@Office appliance
Setting the Time on the Appliance on page 401

Setting up a wireless network
(500W only)
Configuring a Wireless Network on page 163

Installing the Product Key
Upgrading Your Software Product on page 383

Registering your Safe@Office appliance
Registering Your Safe@Office Appliance on page 387

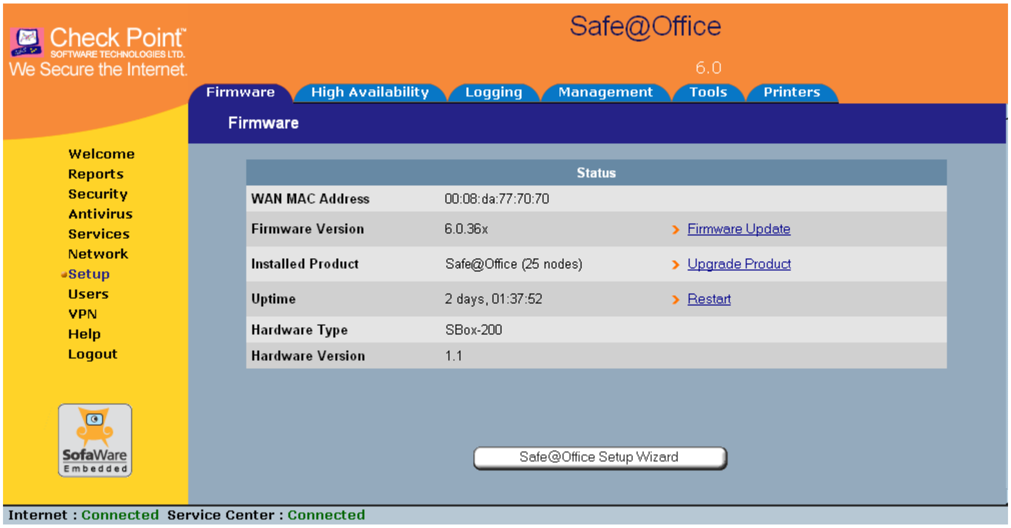
Setting up subscription services
Connecting to a Service Center on page 283

You can access the Setup Wizard at any time after initial setup, using the procedure below.

To access the Setup Wizard

1. Click **Setup** in the main menu, and click the **Firmware** tab.

   The **Firmware** page appears.



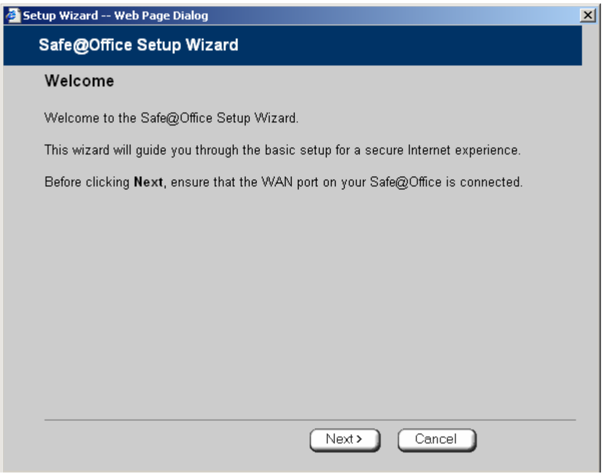
Firmware

Status		
WAN MAC Address	00:08:da:77:70:70	
Firmware Version	6.0.36x	› Firmware Update
Installed Product	Safe@Office (25 nodes)	› Upgrade Product
Uptime	2 days, 01:37:52	› Restart
Hardware Type	SBox-200	
Hardware Version	1.1	

Internet : Connected Service Center : Connected

2. Click **Safe@Office Setup Wizard**.

   The **Safe@Office Setup Wizard** opens with the **Welcome** page displayed.



Safe@Office Setup Wizard

Welcome

Welcome to the Safe@Office Setup Wizard.

This wizard will guide you through the basic setup for a secure Internet experience.

Before clicking **Next**, ensure that the WAN port on your Safe@Office is connected.

Chapter 3

Getting Started

This chapter contains all the information you need in order to get started using your Safe@Office appliance.

This chapter includes the following topics:

Initial Login to the Safe@Office Portal

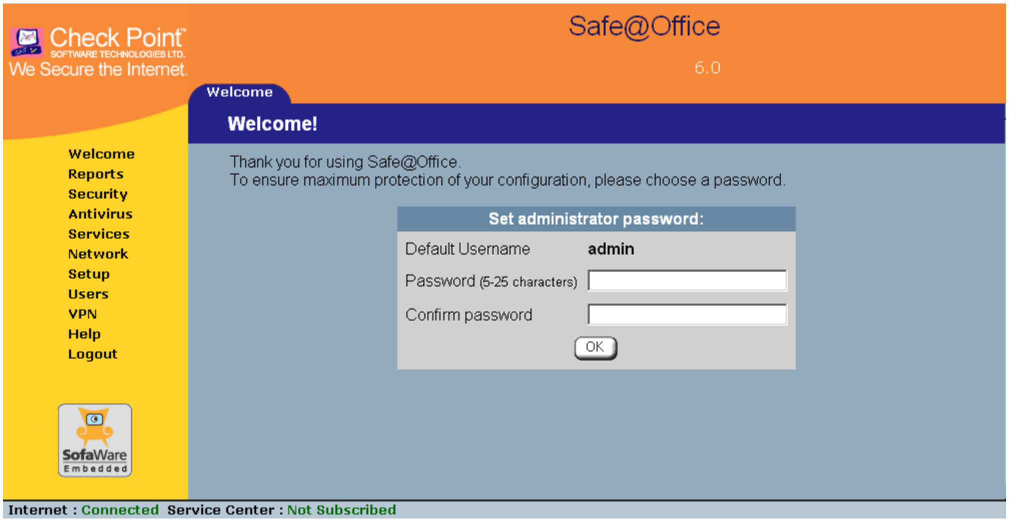
500

The first time you log on to the Safe@Office Portal, you must set up your password.

To log on to the Safe@Office Portal for the first time

1. Browse to http://my.firewall.

The initial login page appears.



Welcome!

Thank you for using Safe@Office.
To ensure maximum protection of your configuration, please choose a password.

Set administrator password:

Default Username	**admin**
Password (5-25 characters)	
Confirm password	

OK

Internet : Connected **Service Center :** Not Subscribed

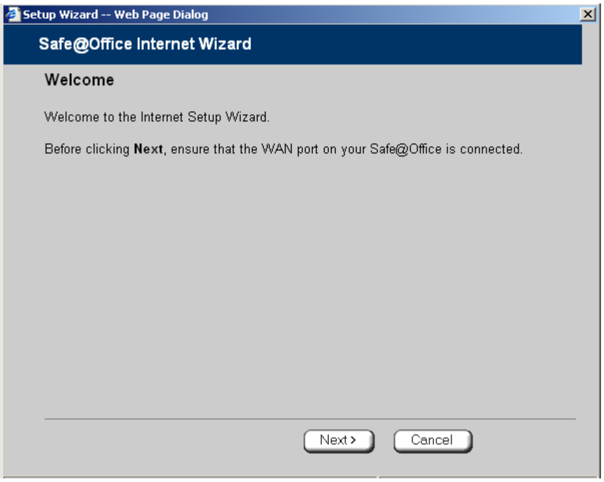
2. Type a password both in the **Password** and the **Confirm Password** fields.

Note: The password must be five to 25 characters (letters or numbers).

Note: You can change your password at any time. For further information, see Changing Your Password.

3. Click **OK**.

The Safe@Office Setup Wizard opens, with the Welcome page displayed.



Setup Wizard -- Web Page Dialog

Safe@Office Internet Wizard

Welcome

Welcome to the Internet Setup Wizard.

Before clicking **Next**, ensure that the WAN port on your Safe@Office is connected.

4. Configure your Internet connection using one of the following ways:

- Internet Wizard

  The Internet Wizard is the first part of the Setup Wizard, and it takes you through basic Internet connection setup, step by step. For information on using the Internet Wizard, see ***Using the Internet Wizard*** on page 56.

  After you have completed the Internet Wizard, the Setup Wizard continues to guide you through appliance setup. For more information, see Setting Up the Safe@Office Appliance.

- Internet Setup

  Internet Setup offers advanced setup options, such as configuring two Internet connections. To use Internet Setup, click Cancel and refer to ***Using Internet Setup*** on page 65.

Logging on to the Safe@Office Portal

500

Note: By default, HTTP and HTTPS access to the Safe@Office Portal is not allowed from the WLAN, unless you do one of the following:

- Configure a specific firewall rule to allow access from the WLAN. See ***Using Rules*** on page 211.

  Or

- Enable HTTPS access from the Internet. See ***Configuring HTTPS*** on page 394.

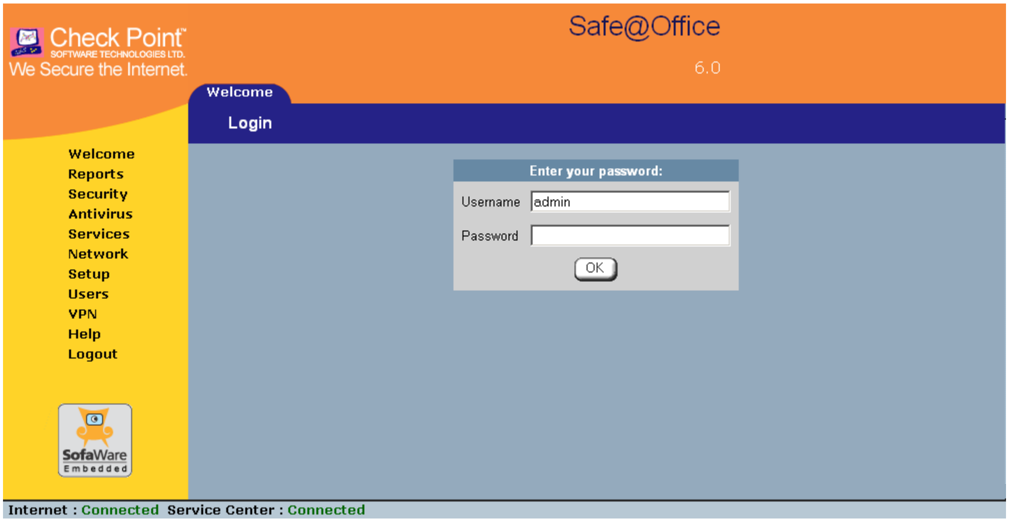
To log on to the Safe@Office Portal

1. Do one of the following:
   - Browse to http://my.firewall.

     Or

   - To log on through HTTPS (locally or remotely), follow the procedure ***Accessing the Safe@Office Portal Remotely*** on page 46.

The login page appears.



Enter your password:

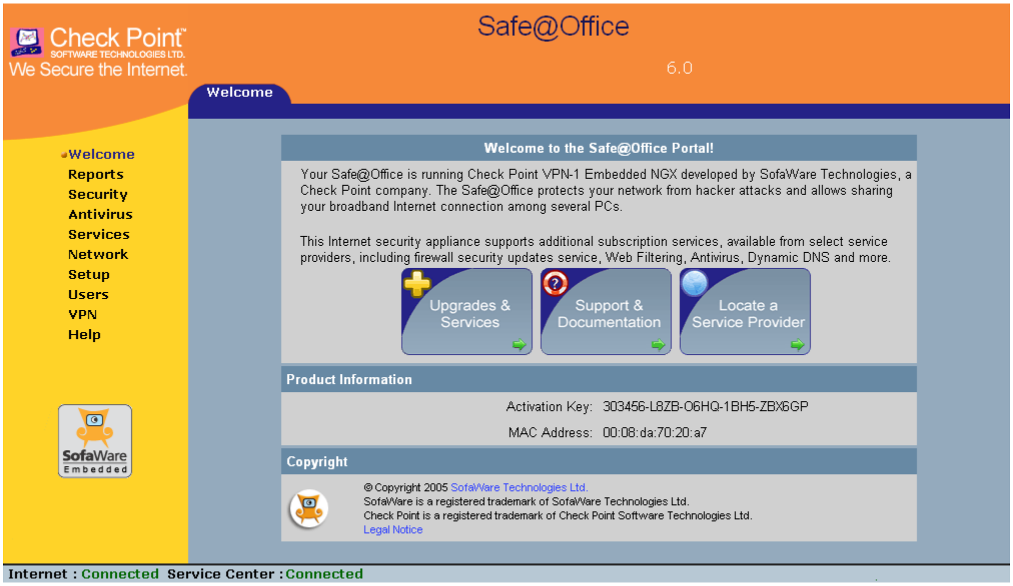
Username admin

Password

Internet : Connected Service Center : Connected

2. Type your username and password.
3. Click OK.

The **Welcome** page appears.



Welcome to the Safe@Office Portal!

Your Safe@Office is running Check Point VPN-1 Embedded NGX developed by SofaWare Technologies, a Check Point company. The Safe@Office protects your network from hacker attacks and allows sharing your broadband Internet connection among several PCs.

This Internet security appliance supports additional subscription services, available from select service providers, including firewall security updates service, Web Filtering, Antivirus, Dynamic DNS and more.

Product Information

Activation Key: 303456-L8ZB-O6HQ-1BH5-ZBX6GP

MAC Address: 00:08:da:70:20:a7

Copyright

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Check Point is a registered trademark of Check Point Software Technologies Ltd.
Legal Notice

Internet : Connected Service Center : Connected

Accessing the Safe@Office Portal Remotely Using HTTPS

500

You can access the Safe@Office Portal remotely (from the Internet) through HTTPS. HTTPS is a protocol for accessing a secure Web server. It is used to transfer confidential user information. If desired, you can also use HTTPS to access the Safe@Office Portal from your internal network.

Note: In order to access the Safe@Office Portal remotely using HTTPS, you must first do both of the following:

- Configure your password, using HTTP. See ***Initial Login to the Safe@Office Portal*** on page 41.
- Configure HTTPS Remote Access. See ***Configuring HTTPS*** on page 394.

Note: Your browser must support 128-bit cipher strength. To check your browser's cipher strength, open Internet Explorer and click Help > About Internet Explorer.

To access the Safe@Office Portal from your internal network

- Browse to https://my.firewall.

  (Note that the URL starts with “https”, not “http”.)

  The Safe@Office Portal appears.

To access the Safe@Office Portal from the Internet

- Browse to https://<firewall_IP_address>:981.

  (Note that the URL starts with “https”, not “http”.)

  The following things happen in the order below:

  If this is your first attempt to access the Safe@Office Portal through HTTPS, the certificate in the Safe@Office appliance is not yet known to the browser, so the Security Alert dialog box appears.

  To avoid seeing this dialog box again, install the certificate of the destination Safe@Office appliance. If you are using Internet Explorer 5, do the following:

  a. Click View Certificate.

     The Certificate dialog box appears, with the General tab displayed.

  b. Click Install Certificate.

     The Certificate Import Wizard opens.

  c. Click Next.

  d. Click Next.

  e. Click Finish.

  f. Click Yes.

  g. Click OK.

The **Security Alert** dialog box reappears.

h. Click **Yes**.

The Safe@Office Portal appears.

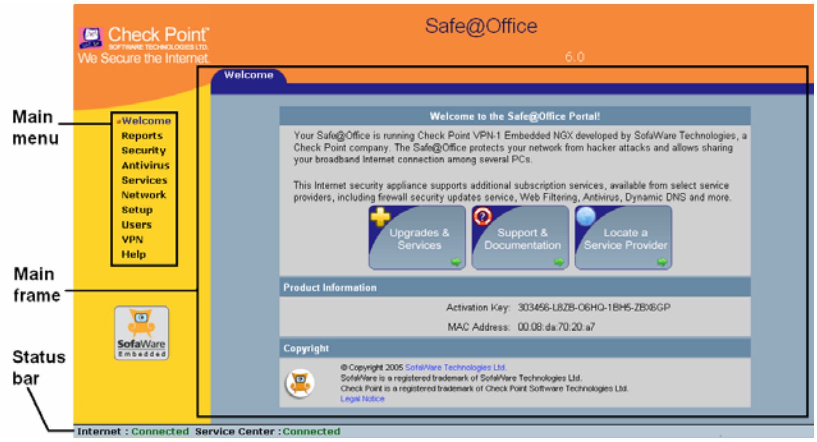
Using the Safe@Office Portal

The Safe@Office Portal is a Web-based management interface, which enables you to manage and configure the Safe@Office appliance operation and options.

The Safe@Office Portal consists of three major elements.

Table 5: Safe@Office Portal Elements

Element	Description
Main menu	Used for navigating between the various topics (such as Reports, Security, and Setup).
Main frame	Displays information and controls related to the selected topic. The main frame may also contain tabs that allow you to view different pages related to the selected topic.
Status bar	Shows your Internet connection and managed services status.



Welcome to the Safe@Office Portal!

Your Safe@Office is running Check Point VPN-1 Embedded NGX developed by SofaWare Technologies, a Check Point company. The Safe@Office protects your network from hacker attacks and allows sharing your broadband Internet connection among several PCs.

This Internet security appliance supports additional subscription services, available from select service providers, including firewall security updates service, Web Filtering, Antivirus, Dynamic DNS and more.

Product Information

Activation Key: 303456-L8ZB-O6HQ-1BH5-ZBX6GP

MAC Address: 00:08:da:70:20:a7

Copyright

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Check Point is a registered trademark of Check Point Software Technologies Ltd.
Legal Notice

Internet : Connected Service Center : Connected

Figure 9: Safe@Office Portal

Main Menu

The main menu includes the following submenus.

Table 6: Main Menu Submenus

This submenu…	Does this…
Welcome	Displays general welcome information.
Reports	Provides reporting capabilities in terms of event logging, traffic monitoring, active computers, and established connections.
Security	Provides controls and options for setting the security of any computer in the network.
Antivirus	Allows you to configure VStream Antivirus settings.
Services	Allows you to control your subscription to subscription services.

This submenu…	Does this…
Network	Allows you to manage and configure your network settings and Internet connections.
Setup	Provides a set of tools for managing your Safe@Office appliance. Allows you to upgrade your license and firmware and to configure HTTPS access to your Safe@Office appliance.
Users	Allows you to manage Safe@Office appliance users.
VPN	Allows you to manage, configure, and log on to VPN sites.
Help	Provides context-sensitive help.
Logout	Allows you to log off of the Safe@Office Portal.

Main Frame

The main frame displays the relevant data and controls pertaining to the menu and tab you select. These elements sometimes differ depending on what model you are using. The differences are described throughout this guide.

Status Bar

The status bar is located at the bottom of each page. It displays the fields below, as well as the date and time.

Table 7: Status Bar Fields

This field...	Displays this...
Internet	Your Internet connection status. The connection status may be one of the following: • Connected. The Safe@Office appliance is connected to the Internet. • Connected – Probing OK. Connection probing is enabled and has detected that the Internet connectivity is OK. • Connected – Probing Failed. Connection probing is enabled and has detected problems with the Internet connectivity. • Not Connected. The Internet connection is down. • Establishing Connection. The Safe@Office appliance is connecting to the Internet. • Contacting Gateway. The Safe@Office appliance is trying to contact the Internet default gateway. • Disabled. The Internet connection has been manually disabled. Note: You can configure both a primary and a secondary Internet connection. When both connections are configured, the Status bar displays both statuses. For example “Internet [Primary]: Connected”. For information on configuring a secondary Internet connection, see ***Configuring the Internet Connection*** on page 55.

This field…	Displays this…
Service Center	Displays your subscription services status. Your Service Center may offer various subscription services. These include the firewall service and optional services such as Web Filtering and Email Antivirus. Your subscription services status may be one of the following: • Not Subscribed. You are not subscribed to security services. • Connection Failed. The Safe@Office appliance failed to connect to the Service Center. • Connecting. The Safe@Office appliance is connecting to the Service Center. • Connected. You are connected to the Service Center, and security services are active.

Logging off

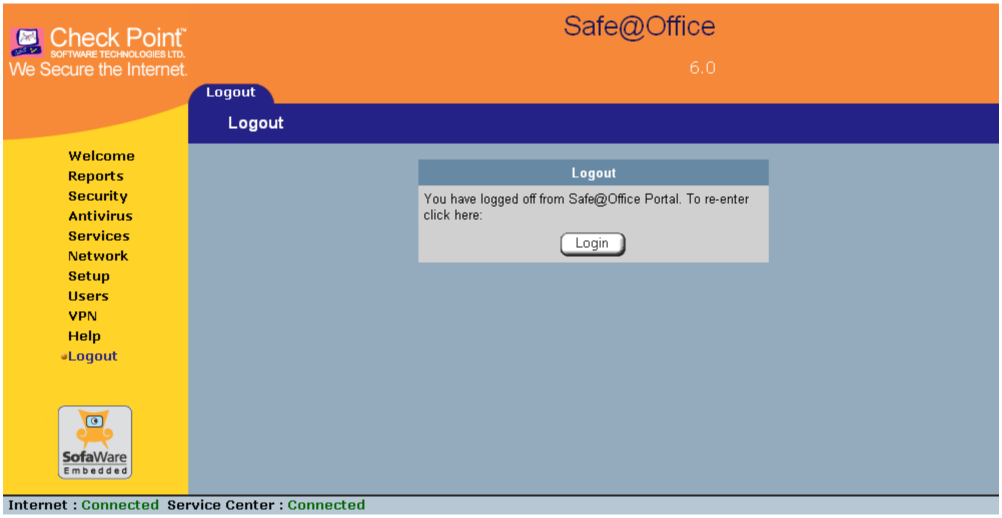
500

Logging off terminates your administration session. Any subsequent attempt to connect to the Safe@Office Portal will require re-entering of the administration password.

To log off of the Safe@Office Portal

- Do one of the following:
  - If you are connected through HTTP, click **Logout** in the main menu.

    The **Logout** page appears.

    Logout

    You have logged off from Safe@Office Portal. To re-enter click here:

    Internet : Connected Service Center : Connected

  - If you are connected through HTTPS, the **Logout** option does not appear in the main menu. Close the browser window.

Chapter 4

Configuring the Internet Connection

This chapter describes how to configure and work with an Safe@Office Internet connection.

This chapter includes the following topics:

Overview

You must configure your Internet connection before you can access the Internet through the Safe@Office appliance. You can configure your Internet connection using any of the following setup tools:

- Setup Wizard. Guides you through the Safe@Office appliance setup step by step. The first part of the Setup Wizard is the Internet Wizard. For further information on the Setup Wizard, see Setting Up the Safe@Office Appliance.
- Internet Wizard. Guides you through the Internet connection configuration process step by step.
- Internet Setup. Offers the following advanced setup options:
  - Configure two Internet connections.

    For information, see ***Configuring a Backup Internet Connection*** on page 92.

- Enable Traffic Shaper for traffic flowing through the connection.

  For information on Traffic Shaper, see ***Using Traffic Shaper*** on page 153.

- Configure a dialup Internet connection.

  Before configuring the connection, you must first set up the modem. For information, see ***Setting Up a Dialup Modem*** on page 86.

Using the Internet Wizard

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The Internet Wizard allows you to configure your Safe@Office appliance for Internet connection quickly and easily through its user-friendly interface. It lets you to choose between the following three types of broadband connection methods:

- Direct LAN Connection
- Cable Modem
- PPTP or PPPoE dialer

Note: The first time you log on to the Safe@Office Portal, the Internet Wizard starts automatically as part of the Setup Wizard. In this case, you should skip to step 3 in the procedure below.

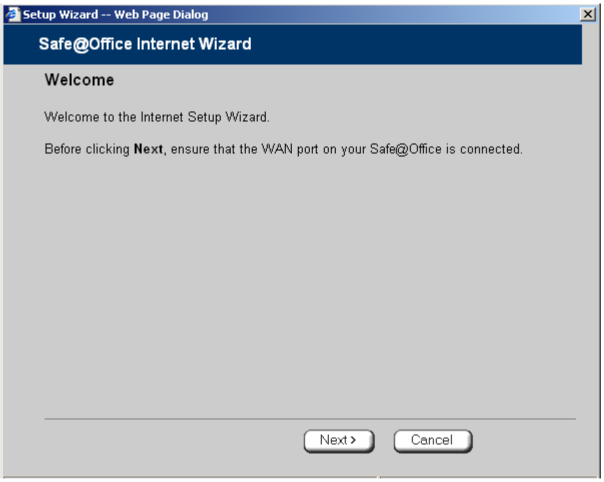
To set up the Internet connection using the Internet Wizard

1. Click Network in the main menu, and click the Internet tab.

   The Internet page appears.

2. Click Internet Wizard.

The Internet Wizard opens with the **Welcome** page displayed.



Safe@Office Internet Wizard

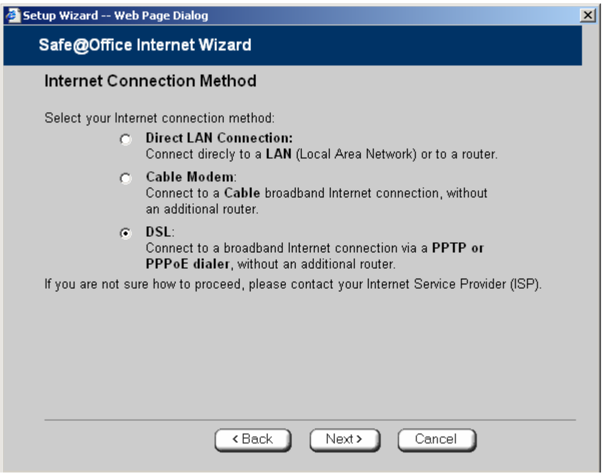
Welcome

Welcome to the Internet Setup Wizard.

Before clicking **Next**, ensure that the WAN port on your Safe@Office is connected.

3. Click **Next**.

   The **Internet Connection Method** dialog box appears.



Safe@Office Internet Wizard

Internet Connection Method

Select your Internet connection method:

○ **Direct LAN Connection:**
Connect direcly to a **LAN** (Local Area Network) or to a router.

○ **Cable Modem**:
Connect to a **Cable** broadband Internet connection, without an additional router.

● **DSL**:
Connect to a broadband Internet connection via a **PPTP or PPPoE dialer**, without an additional router.

If you are not sure how to proceed, please contact your Internet Service Provider (ISP).

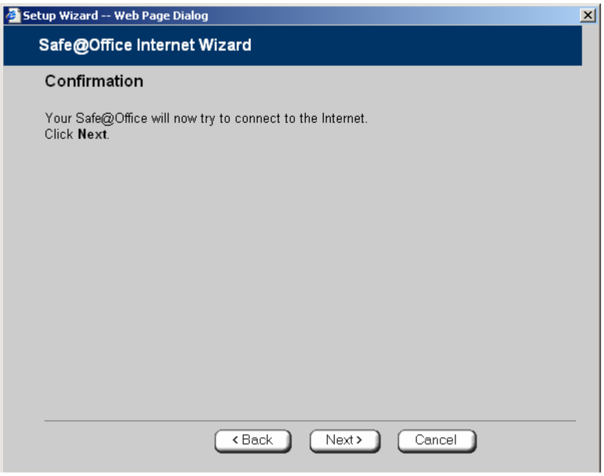
4. Select the Internet connection method you want to use for connecting to the Internet.

Note: If you selected PPTP or PPPoE dialer, do not use your dial-up software to connect to the Internet.

5. Click **Next**.

Using a Direct LAN Connection

No further settings are required for a direct LAN (Local Area Network) connection. The **Confirmation** screen appears.



Confirmation

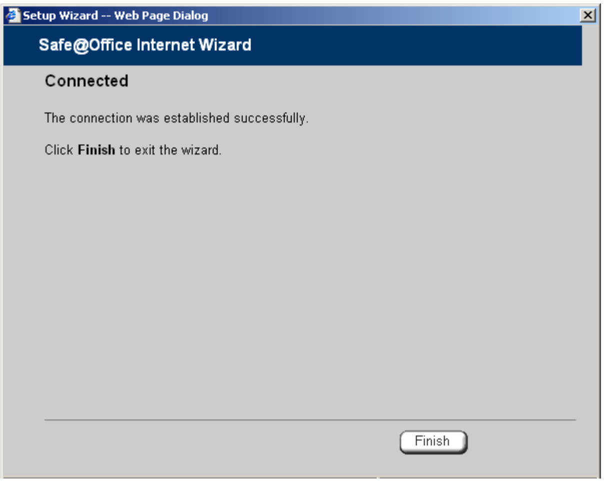
Your Safe@Office will now try to connect to the Internet.
Click **Next**.

1. Click **Next**.

   The system attempts to connect to the Internet via the selected connection.

   The **Connecting...** screen appears.

At the end of the connection process the **Connected** screen appears.



Safe@Office Internet Wizard

Connected

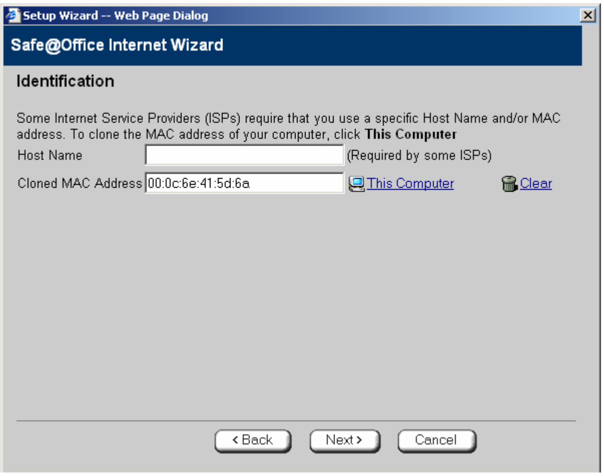
The connection was established successfully.

Click **Finish** to exit the wizard.

2. Click **Finish.**

Using a Cable Modem Connection

If you selected the Cable Modem connection method, the **Identification** dialog box appears.



Some Internet Service Providers (ISPs) require that you use a specific Host Name and/or MAC address. To clone the MAC address of your computer, click **This Computer**

Host Name (Required by some ISPs)

Cloned MAC Address 00:0c:6e:41:5d:6a

1. If your ISP requires a specific hostname for authentication, type it in the **Host Name** field.

   The ISP will supply you with the proper hostname, if required. Most ISPs do not require a specific hostname.

2. A MAC address is a 12-digit identifier assigned to every network device. If your ISP restricts connections to specific, recognized MAC addresses, they will instruct you to enter the MAC address. Otherwise, you may leave this field blank.

   If your ISP requires the MAC address, do either of the following:

   - Click **This Computer** to automatically "clone" the MAC address of your computer to the Safe@Office appliance.

     Or

   - If the ISP requires authentication using the MAC address of a different computer, enter the MAC address in the **MAC cloning** field.

3. Click **Next**.

   The **Confirmation** screen appears.

4. Click **Next**.

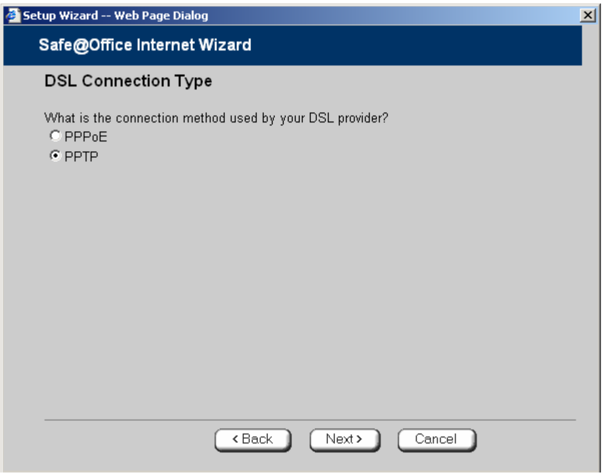
   The system attempts to connect to the Internet.

   The **Connecting...** screen appears. At the end of the connection process the **Connected** screen appears.

5. Click **Finish**.

Using a PPTP or PPPoE Dialer Connection

If you selected the PPTP or PPPoE dialer connection method, the **DSL Connection Type** dialog box appears.



DSL Connection Type

What is the connection method used by your DSL provider?

○ PPPoE

● PPTP

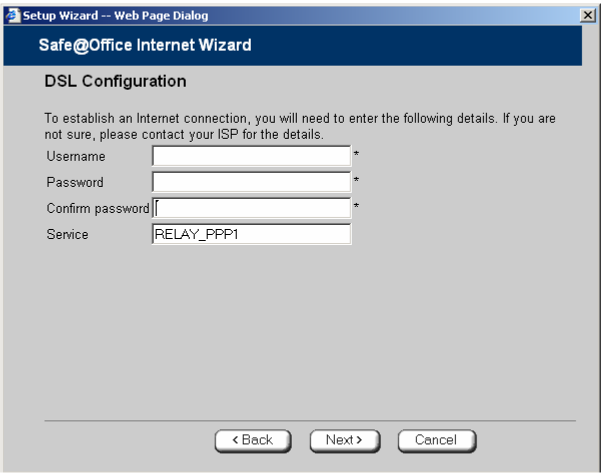
1. Select the connection method used by your DSL provider.

Note: Most xDSL providers use PPPoE. If you are uncertain regarding which connection method to use contact your xDSL provider.

2. Click **Next**.

Using PPPoE

If you selected the PPPoE connection method, the **DSL Configuration** dialog box appears.



Setup Wizard -- Web Page Dialog

Safe@Office Internet Wizard

DSL Configuration

To establish an Internet connection, you will need to enter the following details. If you are not sure, please contact your ISP for the details.

Username	*
Password	*
Confirm password	*
Service	RELAY_PPP1

1. Complete the fields using the information in the table below.
2. Click **Next.**

   The **Confirmation** screen appears.
3. Click **Next.**

   The system attempts to connect to the Internet via the DSL connection.

   The **Connecting**... screen appears.

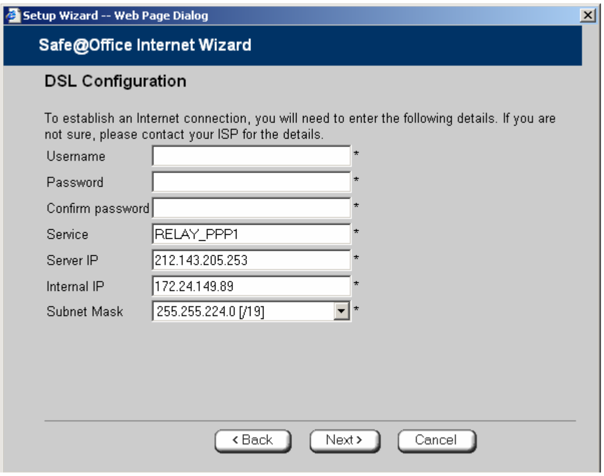
   At the end of the connection process the **Connected** screen appears.
4. Click **Finish.**

Table 8: PPPoE Connection Fields

In this field...	Do this...
Username	Type your user name.
Password	Type your password.
Confirm password	Type your password again.
Service	Type your service name. This field can be left blank.

Using PPTP

If you selected the PPTP connection method, the DSL Configuration dialog box appears.



Setup Wizard -- Web Page Dialog

Safe@Office Internet Wizard

DSL Configuration

To establish an Internet connection, you will need to enter the following details. If you are not sure, please contact your ISP for the details.

Username		*
Password		*
Confirm password		*
Service	RELAY_PPP1	*
Server IP	212.143.205.253	*
Internal IP	172.24.149.89	*
Subnet Mask	255.255.224.0 [/19]	*

1. Complete the fields using the information in the table below.
2. Click Next.

   The Confirmation screen appears.

3. Click **Next.**

   The system attempts to connect to the Internet via the DSL connection.

   The **Connecting**... screen appears.

   At the end of the connection process the **Connected** screen appears.

4. Click **Finish.**

Table 9: PPTP Connection Fields

In this field…	Do this…
Username	Type your user name.
Password	Type your password.
Confirm password	Type your password again.
Service	Type your service name.
Server IP	Type the IP address of the PPTP modem.
Internal IP	Type the local IP address required for accessing the PPTP modem.
Subnet Mask	Type the subnet mask of the PPTP modem.

Using Internet Setup

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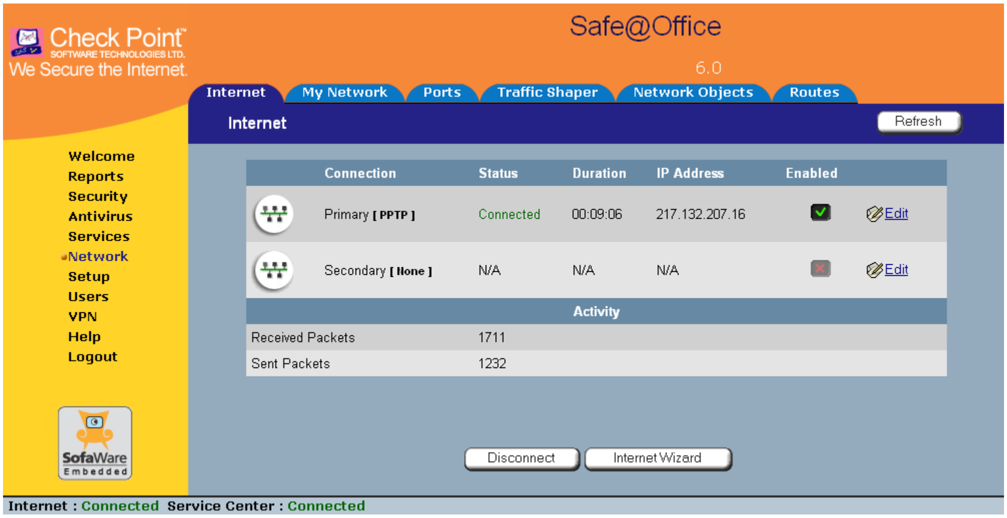
Internet Setup allows you to manually configure your Internet connection.

To configure the Internet connection using Internet Setup

1. Click **Network** in the main menu, and click the **Internet** tab.



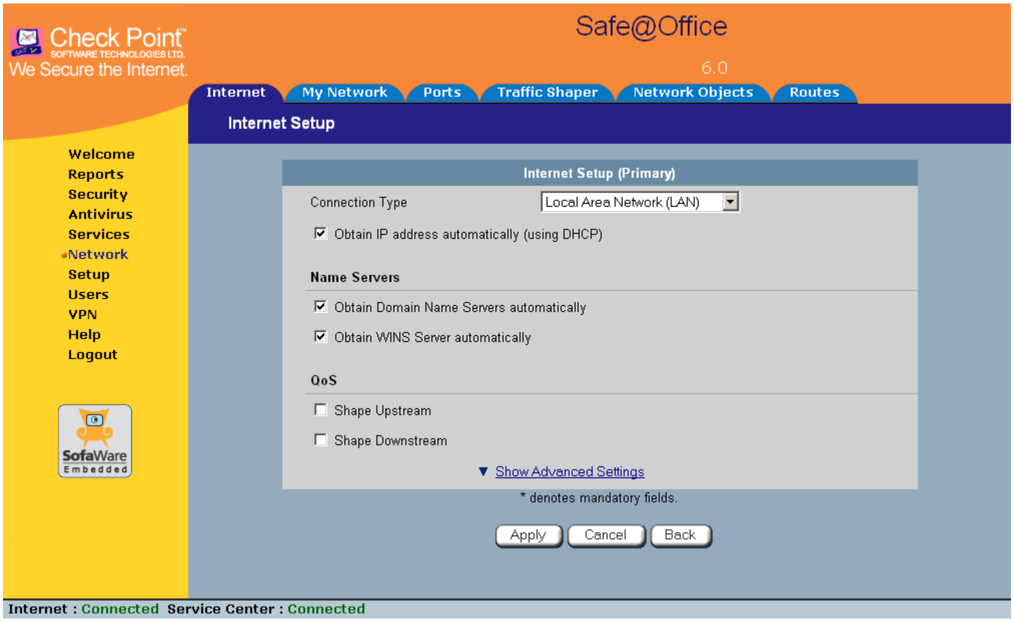
Connection	Status	Duration	IP Address	Enabled	
Primary [PPTP]	Connected	00:09:06	217.132.207.16	✓	Edit
Secondary [None]	N/A	N/A	N/A	✗	Edit

Activity	
Received Packets	1711
Sent Packets	1232

Internet : Connected Service Center : Connected

2. Next to the desired Internet connection, click **Edit**.

The **Internet Setup** page appears.



Internet Setup

Internet Setup (Primary)

Connection Type: Local Area Network (LAN)

☑ Obtain IP address automatically (using DHCP)

Name Servers

☑ Obtain Domain Name Servers automatically

☑ Obtain WINS Server automatically

QoS

☐ Shape Upstream

☐ Shape Downstream

▼ Show Advanced Settings

* denotes mandatory fields.

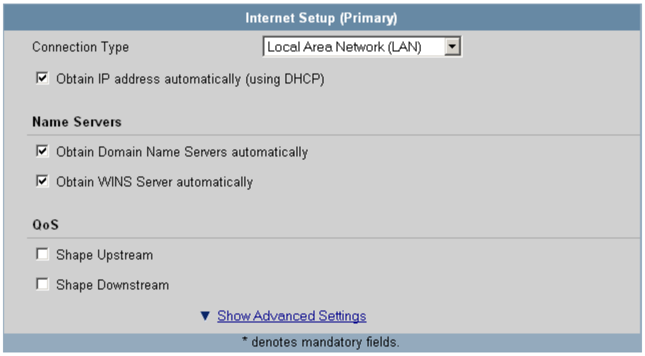
Internet : Connected Service Center : Connected

3. From the **Connection Type** drop-down list, select the Internet connection type you are using/intend to use.

   The display changes according to the connection type you selected.

The following steps should be performed in accordance with the connection type you have chosen.

Using a LAN Connection



Internet Setup (Primary)

Connection Type: Local Area Network (LAN)

☑ Obtain IP address automatically (using DHCP)

Name Servers

☑ Obtain Domain Name Servers automatically

☑ Obtain WINS Server automatically

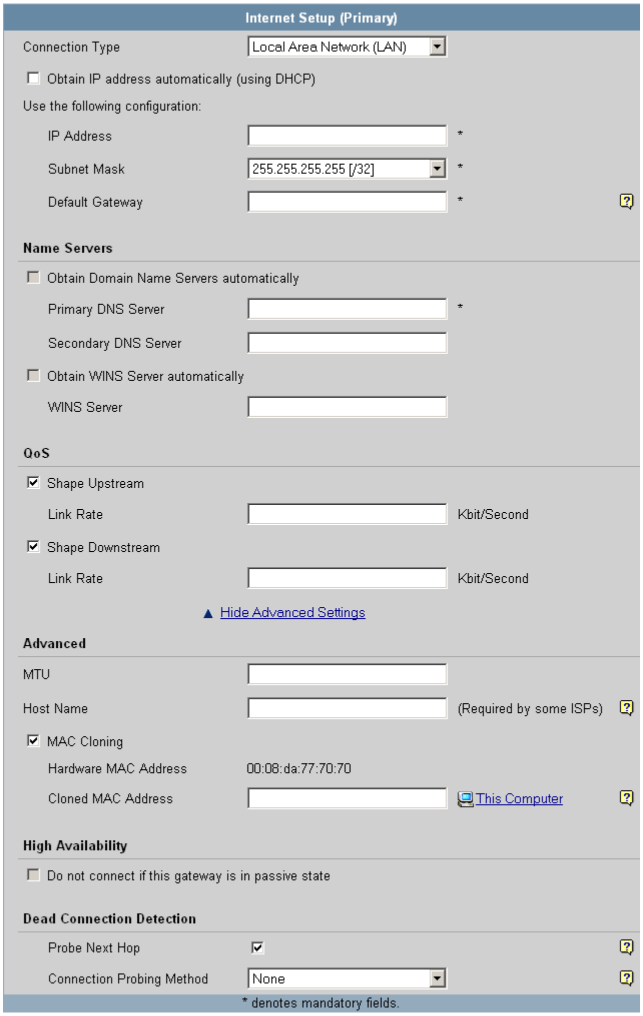
QoS

☐ Shape Upstream

☐ Shape Downstream

1. Complete the fields using the relevant information in ***Internet Setup Fields*** on page 79.

New fields appear, depending on the check boxes you selected.



Internet Setup (Primary)

Connection Type: Local Area Network (LAN)

□ Obtain IP address automatically (using DHCP)

Use the following configuration:

IP Address: *

Subnet Mask: 255.255.255.255 [/32] *

Default Gateway: *

Name Servers

□ Obtain Domain Name Servers automatically

Primary DNS Server: *

Secondary DNS Server:

□ Obtain WINS Server automatically

WINS Server:

QoS

☑ Shape Upstream

Link Rate: Kbit/Second

☑ Shape Downstream

Link Rate: Kbit/Second

▲ Hide Advanced Settings

Advanced

MTU:

Host Name: (Required by some ISPs)

☑ MAC Cloning

Hardware MAC Address: 00:08:da:77:70:70

Cloned MAC Address: This Computer

High Availability

□ Do not connect if this gateway is in passive state

Dead Connection Detection

Probe Next Hop: ☑

Connection Probing Method: None

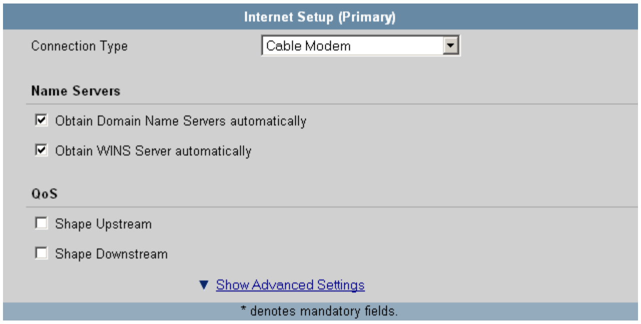
* denotes mandatory fields.

2. Click Apply.

   The Safe@Office appliance attempts to connect to the Internet, and the Status Bar displays the Internet status “Connecting”. This may take several seconds.

   Once the connection is made, the Status Bar displays the Internet status “Connected”.

Using a Cable Modem Connection



Internet Setup (Primary)

Connection Type: Cable Modem

Name Servers

☑ Obtain Domain Name Servers automatically

☑ Obtain WINS Server automatically

QoS

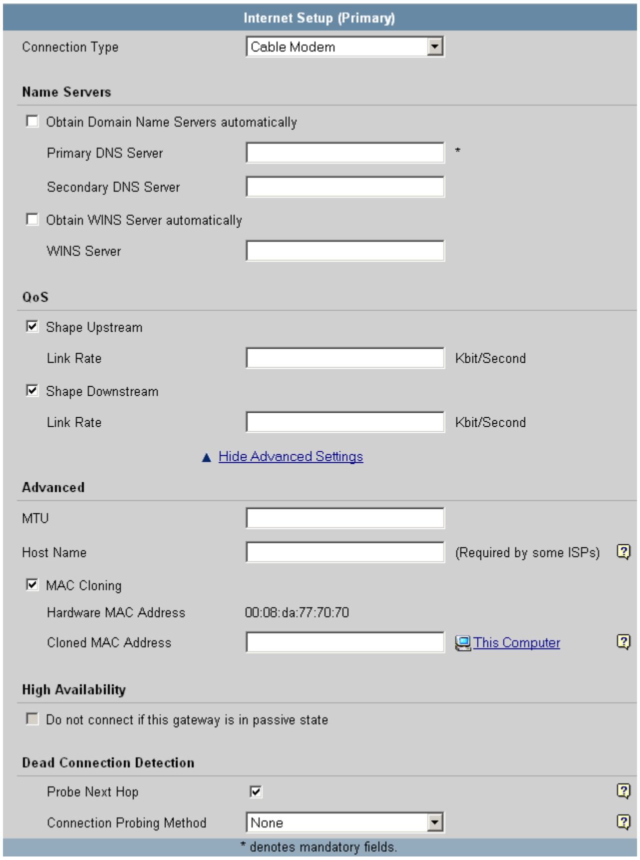
□ Shape Upstream

□ Shape Downstream

* denotes mandatory fields.

1. Complete the fields using the relevant information in ***Internet Setup Fields*** on page 79.

New fields appear, depending on the check boxes you selected.



Internet Setup (Primary)

Connection Type: Cable Modem

Name Servers

☐ Obtain Domain Name Servers automatically

Primary DNS Server: *

Secondary DNS Server:

☐ Obtain WINS Server automatically

WINS Server:

QoS

☑ Shape Upstream

Link Rate: Kbit/Second

☑ Shape Downstream

Link Rate: Kbit/Second

▲ Hide Advanced Settings

Advanced

MTU:

Host Name: (Required by some ISPs)

☑ MAC Cloning

Hardware MAC Address: 00:08:da:77:70:70

Cloned MAC Address: This Computer

High Availability

☐ Do not connect if this gateway is in passive state

Dead Connection Detection

Probe Next Hop: ☑

Connection Probing Method: None

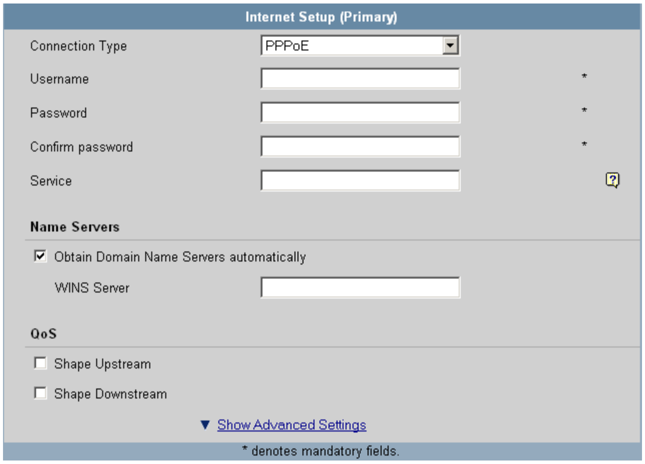
* denotes mandatory fields.

2. Click Apply.

   The Safe@Office appliance attempts to connect to the Internet, and the Status Bar displays the Internet status “Connecting”. This may take several seconds.

   Once the connection is made, the Status Bar displays the Internet status “Connected”.

Using a PPPoE Connection



Internet Setup (Primary)

Connection Type	PPPoE	
Username		*
Password		*
Confirm password		*
Service		

Name Servers

☑ Obtain Domain Name Servers automatically

WINS Server

QoS

☐ Shape Upstream

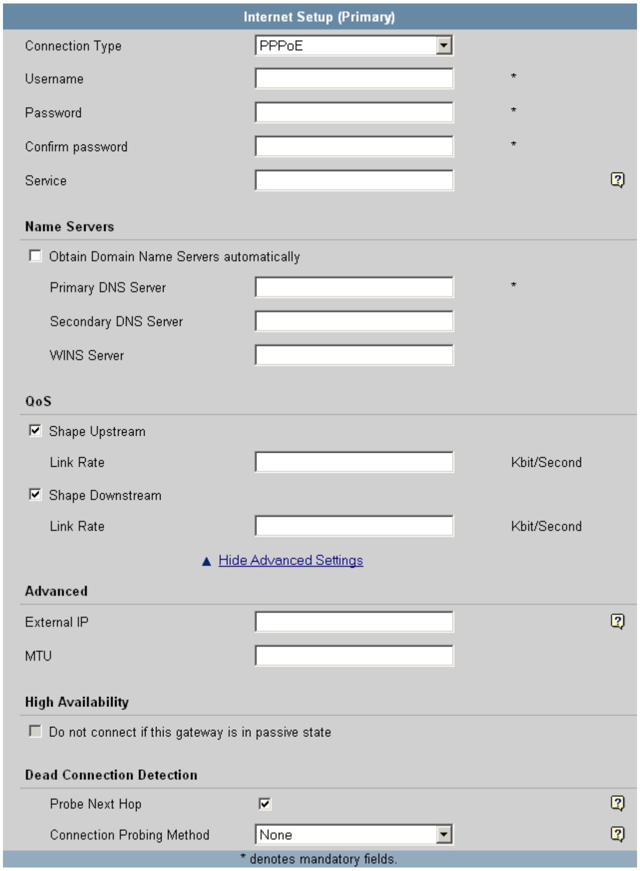
☐ Shape Downstream

▼ Show Advanced Settings

* denotes mandatory fields.

1. Complete the fields using the relevant information in ***Internet Setup Fields*** on page 79.

New fields appear, depending on the check boxes you selected.



Internet Setup (Primary)

Connection Type	PPPoE	
Username		*
Password		*
Confirm password		*
Service		

Name Servers

□ Obtain Domain Name Servers automatically

Primary DNS Server		*
Secondary DNS Server		
WINS Server		

QoS

☑ Shape Upstream

Link Rate		Kbit/Second

☑ Shape Downstream

Link Rate		Kbit/Second

▲ Hide Advanced Settings

Advanced

External IP	
MTU	

High Availability

□ Do not connect if this gateway is in passive state

Dead Connection Detection

Probe Next Hop	☑
Connection Probing Method	None

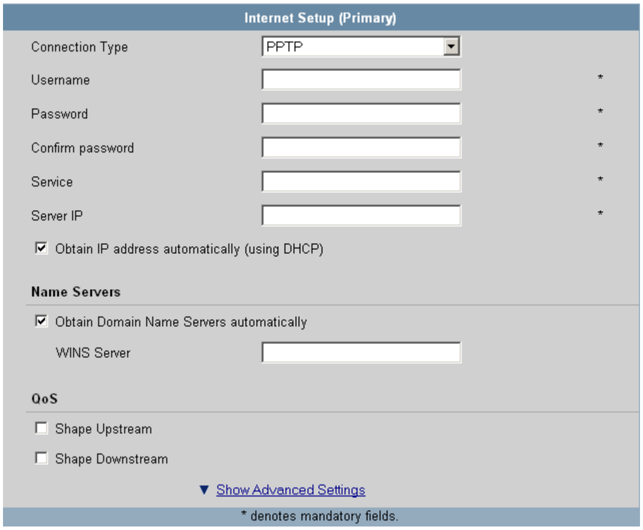
* denotes mandatory fields.

2. Click **Apply**.

   The Safe@Office appliance attempts to connect to the Internet, and the Status Bar displays the Internet status “Connecting”. This may take several seconds.

   Once the connection is made, the Status Bar displays the Internet status “Connected”.

Using a PPTP Connection



Internet Setup (Primary)

Connection Type	PPTP	
Username		*
Password		*
Confirm password		*
Service		*
Server IP		*

☑ Obtain IP address automatically (using DHCP)

Name Servers

☑ Obtain Domain Name Servers automatically

WINS Server

QoS

☐ Shape Upstream

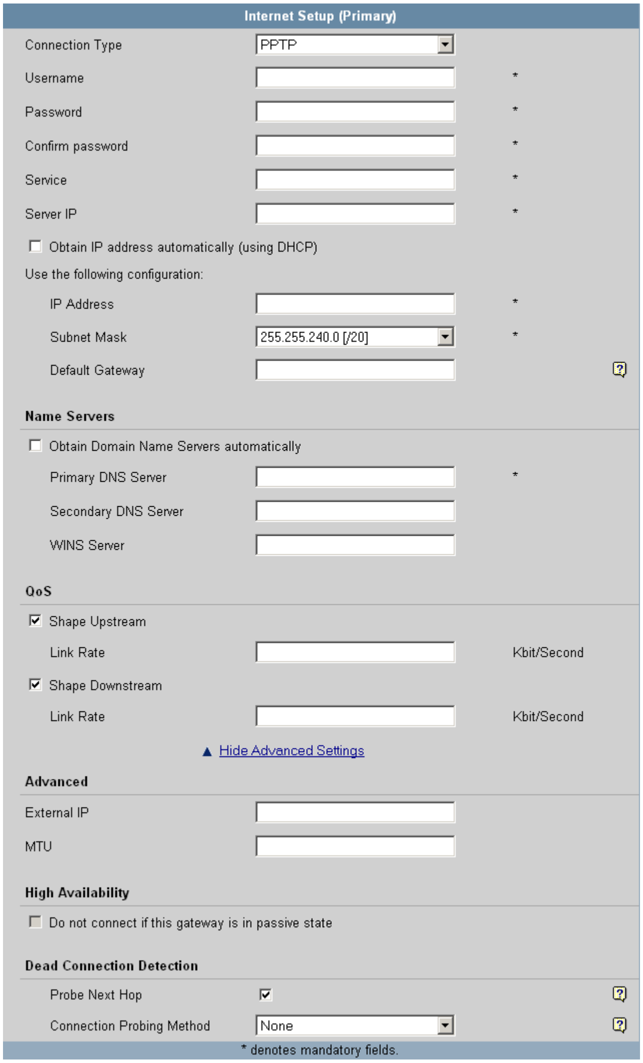
☐ Shape Downstream

▼ Show Advanced Settings

* denotes mandatory fields.

1. Complete the fields using the relevant information in ***Internet Setup Fields*** on page 79.

New fields appear, depending on the check boxes you selected.



Internet Setup (Primary)

Connection Type	PPTP	
Username		*
Password		*
Confirm password		*
Service		*
Server IP		*
□ Obtain IP address automatically (using DHCP)		
Use the following configuration:		
IP Address		*
Subnet Mask	255.255.240.0 [/20]	*
Default Gateway		?
Name Servers		
□ Obtain Domain Name Servers automatically		
Primary DNS Server		*
Secondary DNS Server		
WINS Server		
QoS		
☑ Shape Upstream		
Link Rate		Kbit/Second
☑ Shape Downstream		
Link Rate		Kbit/Second
▲ Hide Advanced Settings		
Advanced		
External IP		
MTU		
High Availability		
□ Do not connect if this gateway is in passive state		
Dead Connection Detection		
Probe Next Hop	☑	?
Connection Probing Method	None	?

* denotes mandatory fields.

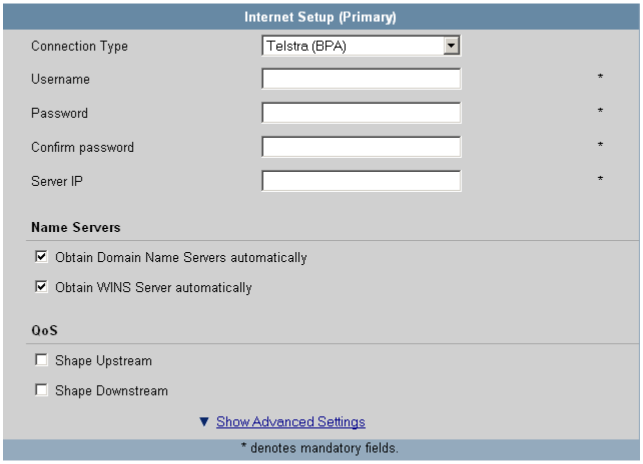
2. Click **Apply**.

   The Safe@Office appliance attempts to connect to the Internet, and the Status Bar displays the Internet status “Connecting”. This may take several seconds.

Once the connection is made, the Status Bar displays the Internet status "Connected".

Using a Telstra (BPA) Connection

Use this Internet connection type only if you are subscribed to Telstra® BigPond™ Internet. Telstra BigPond is a trademark of Telstra Corporation Limited.



Internet Setup (Primary)

Connection Type	Telstra (BPA)	
Username		*
Password		*
Confirm password		*
Server IP		*

Name Servers

☑ Obtain Domain Name Servers automatically

☑ Obtain WINS Server automatically

QoS

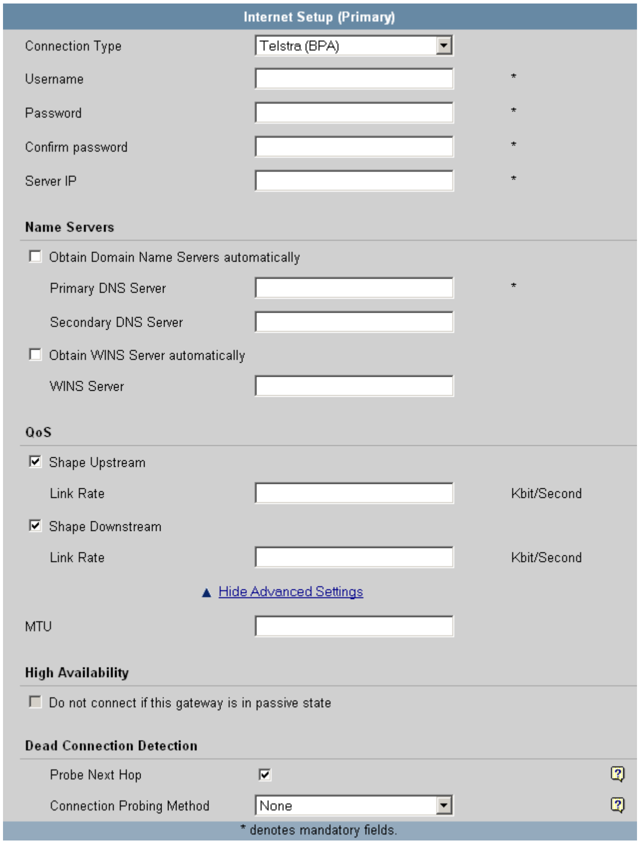
□ Shape Upstream

□ Shape Downstream

* denotes mandatory fields.

1. Complete the fields using the relevant information in ***Internet Setup Fields*** on page 79.

New fields appear, depending on the check boxes you selected.



Internet Setup (Primary)

Connection Type	Telstra (BPA)	
Username		*
Password		*
Confirm password		*
Server IP		*

Name Servers

☐ Obtain Domain Name Servers automatically

Primary DNS Server		*
Secondary DNS Server		

☐ Obtain WINS Server automatically

WINS Server		

QoS

☑ Shape Upstream

Link Rate		Kbit/Second

☑ Shape Downstream

Link Rate		Kbit/Second

▲ Hide Advanced Settings

MTU	

High Availability

☐ Do not connect if this gateway is in passive state

Dead Connection Detection

Probe Next Hop	☑
Connection Probing Method	None

* denotes mandatory fields.

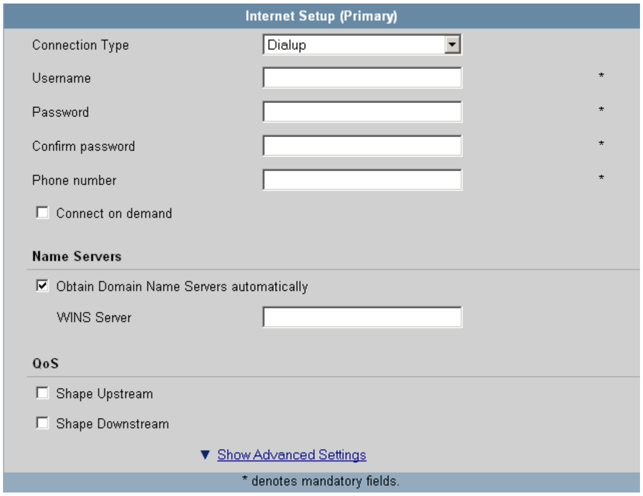
2. Click Apply.

   The Safe@Office appliance attempts to connect to the Internet, and the Status Bar displays the Internet status “Connecting”. This may take several seconds.

   Once the connection is made, the Status Bar displays the Internet status “Connected”.

Using a Dialup Connection

To use this connection type, you must first set up the dialup modem. For information, see ***Setting Up a Dialup Modem*** on page 86.



Internet Setup (Primary)

Connection Type	Dialup ▾	
Username		*
Password		*
Confirm password		*
Phone number		*

□ Connect on demand

Name Servers

☑ Obtain Domain Name Servers automatically

WINS Server

QoS

□ Shape Upstream

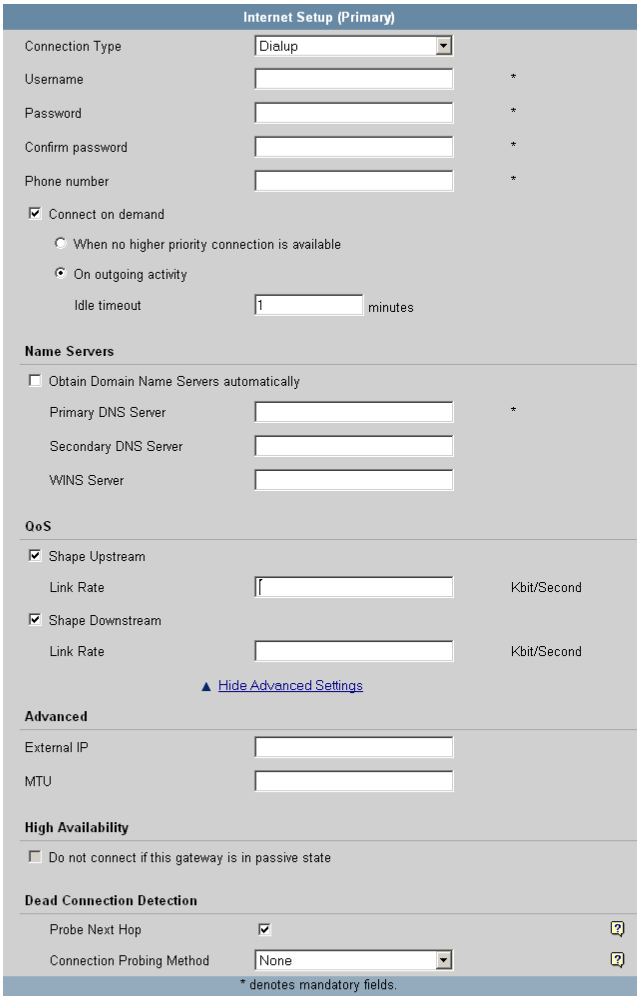
□ Shape Downstream

▼ Show Advanced Settings

* denotes mandatory fields.

1. Complete the fields using the relevant information in ***Internet Setup Fields*** on page 79.

New fields appear, depending on the check boxes you selected.



Internet Setup (Primary)

Connection Type	Dialup	
Username		*
Password		*
Confirm password		*
Phone number		*

☑ Connect on demand

○ When no higher priority connection is available

● On outgoing activity

Idle timeout 1 minutes

Name Servers

☐ Obtain Domain Name Servers automatically

Primary DNS Server		*
Secondary DNS Server		
WINS Server		

QoS

☑ Shape Upstream

Link Rate Kbit/Second

☑ Shape Downstream

Link Rate Kbit/Second

▲ Hide Advanced Settings

Advanced

External IP

MTU

High Availability

☐ Do not connect if this gateway is in passive state

Dead Connection Detection

Probe Next Hop ☑

Connection Probing Method None

* denotes mandatory fields.

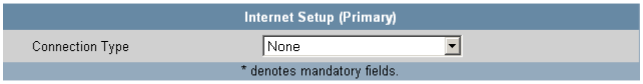
2. Click Apply.

   The Safe@Office appliance attempts to connect to the Internet, and the Status Bar displays the Internet status “Connecting”. This may take several seconds.

Once the connection is made, the Status Bar displays the Internet status “Connected”.

Using No Connection

If you do not have an Internet connection, set the connection type to None.



Internet Setup (Primary)

Connection Type: None

* denotes mandatory fields.

- Click Apply.

Table 10: Internet Setup Fields

In this field...	Do this...
Username	Type your user name.
Password	Type your password.
Confirm password	Type your password.
Service	Type your service name. If your ISP has not provided you with a service name, leave this field empty.
Server IP	If you selected PPTP, type the IP address of the PPTP server as given by your ISP. If you selected Telstra (BPA), type the IP address of the Telstra authentication server as given by Telstra.
Phone Number	If you selected Dialup, type the phone number that the modem should dial, as given by your ISP.

In this field…	Do this…
Connect on demand	Select this option if you do not want the dialup modem to be constantly connected to the Internet. The modem will dial a connection only under certain conditions. This option is useful when configuring a dialup backup connection. For information, see ***Setting Up a Dialup Backup Connection*** on page 94.
When no higher priority connection is available	Select this option to specify that the dialup modem should only dial a connection if no other connection exists, and the Safe@Office appliance is not acting as a Backup appliance. If another connection opens, the dialup modem will disconnect. For information on configuring the appliance as a Backup or Master, see ***Configuring High Availability*** on page 121.
On outgoing activity	Select this option to specify that the dialup modem should only dial a connection if no other connection exists, and there is outgoing activity (that is, packets need to be transmitted to the Internet). If another connection opens, or if the connection times out, the dialup modem will disconnect.
Idle timeout	Type the amount of time (in minutes) that the connection can remain idle. Once this period of time has elapsed, the dialup modem will disconnect.
Obtain IP address automatically (using DHCP)	Clear this option if you do not want the Safe@Office appliance to obtain an IP address automatically using DHCP.
IP Address	Type the static IP address of your Safe@Office appliance.
Subnet Mask	Select the subnet mask that applies to the static IP address of your Safe@Office appliance.

In this field...	Do this...
Default Gateway	Type the IP address of your ISP’s default gateway.
Name Servers	
Obtain Domain Name Servers automatically	Clear this option if you want the Safe@Office appliance to obtain an IP address automatically using DHCP, but not to automatically configure DNS servers.
Obtain WINS Server automatically	Clear this option if you want the Safe@Office appliance to obtain an IP address automatically using DHCP, but not to automatically configure the WINS server.
Primary DNS Server	Type the Primary DNS server IP address.
Secondary DNS Server	Type the Secondary DNS server IP address.
WINS Server	Type the WINS server IP address.
QoS	
Shape Upstream: Link Rate	Select this option to enable Traffic Shaper for outgoing traffic. Then type a rate (in kilobits/second) slightly lower than your Internet connection's maximum measured upstream speed in the field provided. It is recommended to try different rates in order to determine which one provides the best results. For information on using Traffic Shaper, see ***Using Traffic Shaper*** on page 153.

In this field…	Do this…
Shape Downstream: Link Rate	Select this option to enable Traffic Shaper for incoming traffic. Then type a rate (in kilobits/second) slightly lower than your Internet connection's maximum measured downstream speed in the field provided. It is recommended to try different rates in order to determine which one provides the best results. Note: Traffic Shaper cannot control the number or type of packets it receives from the Internet; it can only affect the rate of incoming traffic by dropping received packets. This makes the shaping of inbound traffic less accurate than the shaping of outbound traffic. It is therefore recommended to enable traffic shaping for incoming traffic only if necessary. For information on using Traffic Shaper, see ***Using Traffic Shaper*** on page 153.
Advanced	
External IP	If you selected PPTP, type the IP address of the PPTP client as given by your ISP. If you selected PPPoE, this field is optional, and you do not have to fill it in unless your ISP has instructed you to do so.
MTU	This field allows you to control the maximum transmission unit size. As a general recommendation you should leave this field empty. If however you wish to modify the default MTU, it is recommended that you consult with your ISP first and use MTU values between 1300 and 1500.

In this field…	Do this…
MAC Cloning	A MAC address is a 12-digit identifier assigned to every network device. If your ISP restricts connections to specific, recognized MAC addresses, you must select this option to clone a MAC address. Note: When configuring MAC cloning for the secondary Internet connection, the DMZ/WAN2 port must be configured as WAN2; otherwise this field is disabled. For information on configuring ports, see ***Managing Ports*** on page 147.
Hardware MAC Address	This field displays the Safe@Office appliance's MAC address. This field is read-only.
Cloned MAC Address	Do one of the following: • Click This Computer to automatically "clone" the MAC address of your computer to the Safe@Office appliance. • If the ISP requires authentication using the MAC address of a different computer, type the MAC address in this field. Note: In the secondary Internet connection, this field is enabled only if the DMZ/WAN2 port is set to WAN2.
High Availability	The High Availability area only appears in Safe@Office 500 with Power Pack.
Do not connect if this gateway is in passive state	If you are using High Availability (HA), select this option to specify that the gateway should connect to the Internet only if it is the Active Gateway in the HA cluster. This field is only enabled if HA is configured. For information on HA, see ***Configuring High Availability*** on page 121.
Dead Connection Detection	

In this field…	Do this…
Probe Next Hop	Select this option to automatically detect loss of connectivity to the default gateway. If you selected LAN, this is done by sending ARP requests to the default gateway. If you selected PPTP, PPPoE, or Dialup, this is done by sending PPP echo reply (LCP) messages to the PPP peer. By default, if the default gateway does not respond, the Internet connection is considered to be down. If it is determined that the Internet connection is down, and two Internet connections are defined, a failover will be performed to the second Internet connection, ensuring continuous Internet connectivity. This option is selected by default.

In this field...	Do this...
Connection Probing Method	While the **Probe Next Hop** option checks the availability of the next hop router, which is usually at your ISP, connectivity to the next hop router does not always indicate that the Internet is accessible. For example, if there is a problem with a different router at the ISP, the next hop will be reachable, but the Internet might be inaccessible. Connection probing is a way to detect Internet failures that are more than one hop away. Specify what method to use for probing the connection, by selecting one of the following: • **None**. Do not perform Internet connection probing. Next hop probing will still be used, if the **Probe Next Hop** check box is selected. This is the default value. • **Ping Addresses**. Ping anywhere from one to three servers specified by IP address or DNS name in the **1**, **2**, and **3** fields. If for 45 seconds none of the defined servers respond to pinging, the Internet connection is considered to be down. Use this method if you have reliable servers that can be pinged, that are a good indicator of Internet connectivity, and that are not likely to fail simultaneously (that is, they are not at the same location). • **Probe DNS Servers**. Probe the primary and secondary DNS servers. If for 45 seconds neither gateway responds, the Internet connection is considered to be down. Use this method if the availability of your DNS servers is a good indicator for the availability of Internet connectivity. • **Probe VPN Gateway (RDP)**. Send RDP echo requests to up to three Check Point VPN gateways specified by IP address or DNS name in the **1**, **2**, and **3** fields. If for 45 seconds none of the defined gateways respond, the Internet connection is considered to be down. Use this option if you have Check Point VPN gateways, and you want loss of connectivity to these gateways to trigger ISP failover to an Internet connection from which these gateways are reachable.

In this field...	Do this...
1, 2, 3	If you chose the Ping Addresses connection probing method, type the IP addresses or DNS names of the desired servers. If you chose the Probe VPN Gateway (RDP) connection probing method, type the IP addresses or DNS names of the desired VPN gateways. You can clear a field by clicking Clear.

Setting Up a Dialup Modem

500

You can use a dialup modem as a primary or secondary Internet connection method. This is useful in locations where broadband Internet access is unavailable.

When used as a backup Internet connection, the modem can be automatically disconnected when not in use. For information on setting up a dialup backup connection, see ***Setting Up a Dialup Backup Connection*** on page 94.

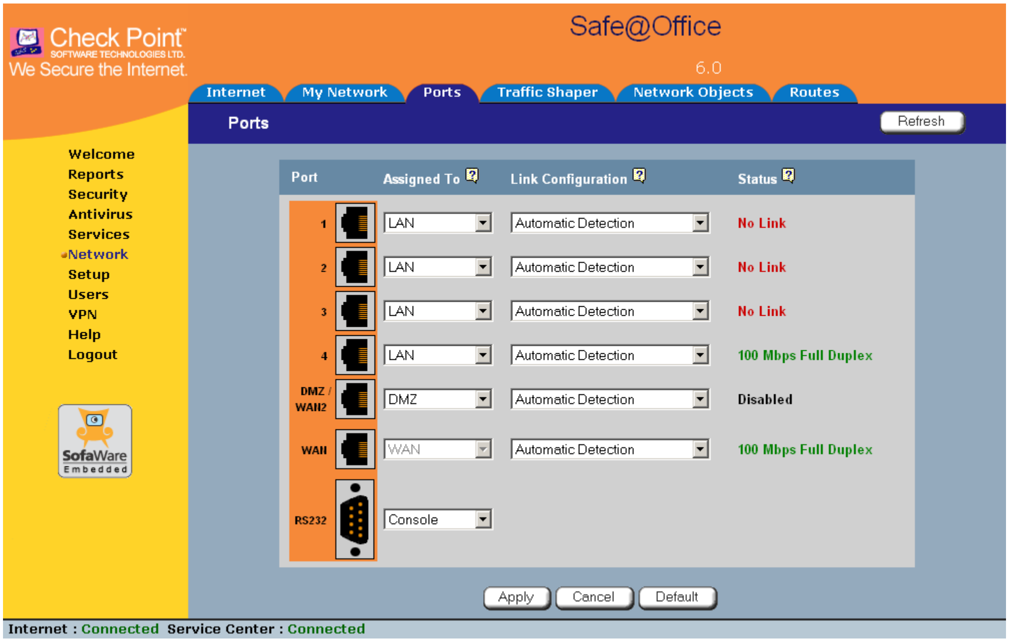
To set up a dialup modem

1. Connect a regular or ISDN dialup modem to your Safe@Office appliance's serial port.

   For information on locating the serial port, see Rear Panel.

2. Click Network in the main menu, and click the Ports tab.

The **Ports** page appears.

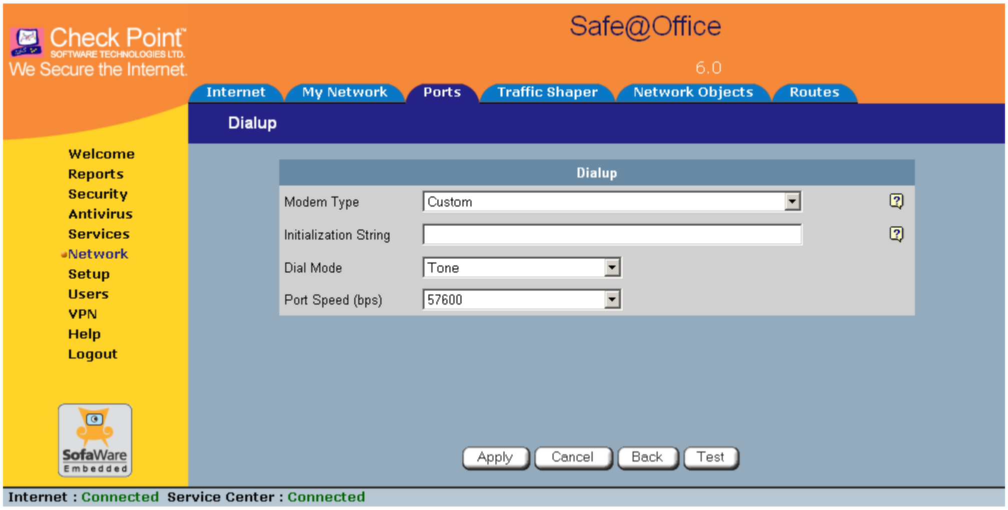


Port	Assigned To	Link Configuration	Status
1	LAN	Automatic Detection	No Link
2	LAN	Automatic Detection	No Link
3	LAN	Automatic Detection	No Link
4	LAN	Automatic Detection	100 Mbps Full Duplex
DMZ / WAN2	DMZ	Automatic Detection	Disabled
WAN	WAN	Automatic Detection	100 Mbps Full Duplex
RS232	Console		

Internet : Connected Service Center : Connected

3. In the **RS232** drop-down list, select **Dialup**.
4. Click **Apply**.
5. Next to the **RS232** drop-down list, click **Setup**.

The **Dialup** page appears.



Dialup

Modem Type	Custom
Initialization String	
Dial Mode	Tone
Port Speed (bps)	57600

Internet : Connected Service Center : Connected

6. Complete the fields using the information in the table below.
7. Click **Apply**.
8. To check that that the values you entered are correct, click **Test**.

   The **Dialup** page displays a message indicating whether the test succeeded.
9. Configure a Dialup Internet connection using the information in ***Using Internet Setup*** on page 65.

Table 11: Dialup Fields

In this field...	Do this...
Modem Type	Select the modem type. If you selected **Custom**, the **Installation String** field is enabled. Otherwise, it is filled in with the correct installation string for the modem type.
Initialization String	Type the installation string for the custom modem type. If you selected a standard modem type, this field is read-only.

In this field…	Do this…
Dial Mode	Select the dial mode the modem uses.
Port Speed	Select the modem's port speed (in bits per second).

Viewing Internet Connection Information

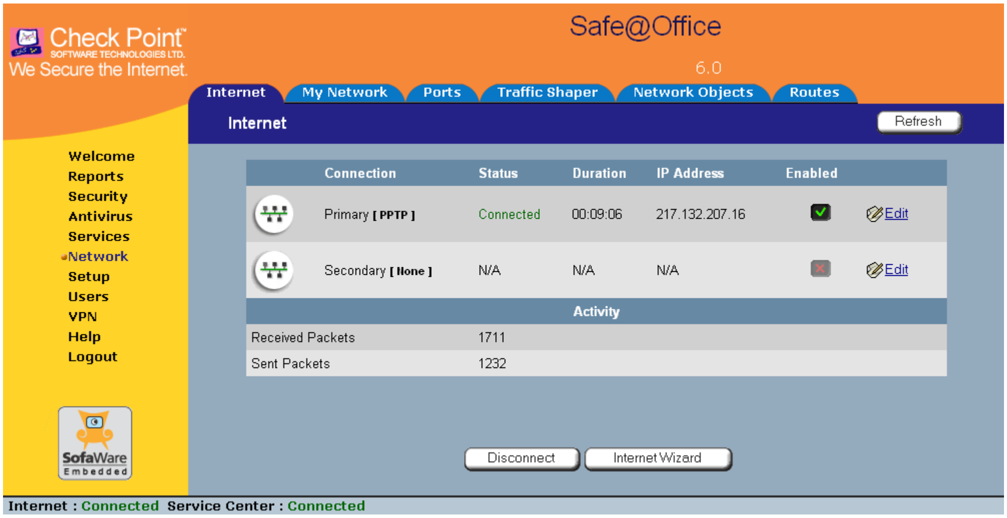
500

You can view information on your Internet connection(s) in terms of status, duration, and activity.

To view Internet connection information

1. Click **Network** in the main menu, and click the **Internet** tab.

   The **Internet** page appears.



Connection	Status	Duration	IP Address	Enabled	
Primary [PPTP]	Connected	00:09:06	217.132.207.16	✓	Edit
Secondary [None]	N/A	N/A	N/A	☒	Edit

Activity	
Received Packets	1711
Sent Packets	1232

Internet : Connected Service Center : Connected

   For an explanation of the fields on this page, see the table below.

2. To refresh the information on this page, click **Refresh**.

Table 12: Internet Page Fields

Field	Description
Status	Indicates the connection's status.

Duration	Indicates the connection duration, if active. The duration is given in the format hh:mm:ss, where:
	hh=hours
	mm=minutes
	ss=seconds

IP Address	Your IP address.
Enabled	Indicates whether or not the connection is enabled. For further information, see ***Enabling/Disabling the Internet Connection*** on page 90
Received Packets	The number of data packets received in the active connection.
Sent Packets	The number of data packets sent in the active connection.

Enabling/Disabling the Internet Connection

500

You can temporarily disable an Internet connection. This is useful if, for example, you are going on vacation and do not want to leave your computer connected to the Internet. If you have two Internet connections, you can force the Safe@Office appliance to use a particular connection, by disabling the other connection.

The Internet connection's Enabled/Disabled status is persistent through Safe@Office appliance reboots.

To enable/disable an Internet connection

1. Click **Network** in the main menu, and click the **Internet** tab.

   The **Internet** page appears.

2. Next to the Internet connection, do one of the following:

   - To enable the connection, click ☒.

     The button changes to ☑ and the connection is enabled.

   - To disable the connection, click ☑.

     The button changes to ☒ and the connection is disabled.

Using Quick Internet Connection/Disconnection

500

By clicking the Connect or Disconnect button (depending on the connection status) on the Internet page, you can establish a quick Internet connection using the currently-selected connection type. In the same manner, you can terminate the active connection.

The Internet connection retains its Connected/Not Connected status until the Safe@Office appliance is rebooted. The Safe@Office appliance then connects to the Internet if the connection is enabled. For information on enabling an Internet connection, see ***Enabling/Disabling the Internet Connection*** on page 90.

Configuring a Backup Internet Connection

You can configure both a primary and a secondary Internet connection. The secondary connection acts as a backup, so that if the primary connection fails, the Safe@Office appliance remains connected to the Internet.

Note: You can configure different DNS servers for the primary and secondary connections. The Safe@Office appliance acts as a DNS relay and routes requests from computers within the network to the appropriate DNS server for the active Internet connection.

Setting Up a LAN or Broadband Backup Connection

Using the Safe@Office Appliance's WAN Port

500

To set up a LAN or broadband backup Internet connection

1. Connect a hub or switch to the WAN port on your appliance's rear panel.
2. Connect your two modems or routers to the hub/switch.
3. Configure two Internet connections.

   For instructions, see ***Using Internet Setup*** on page 65.

⚠ Important: The two connections can be of different types. However, they cannot both be LAN DHCP connections.

Using the Safe@Office Appliance's DMZ/WAN2 Port

500

To set up a LAN or broadband backup Internet connection

1. Connect a modem to the DMZ/WAN2 port on your appliance's rear panel.
2. Click Network in the main menu, and click the Ports tab.

   The Ports page appears.
3. In the DMZ/WAN2 drop-down list, select WAN2.
4. Click Apply.
5. Configure two Internet connections.

   For instructions, see ***Using Internet Setup*** on page 65.

Setting Up a Dialup Backup Connection

500

If desired, you can use a dialup modem as the secondary Internet connection method. The Safe@Office appliance automatically dials the modem if the primary Internet connection fails.

To set up a dialup backup Internet connection

1. Setup a dialup modem.

   For instructions, see ***Setting Up a Dialup Modem*** on page 86.

2. Configure a LAN or broadband primary Internet connection.

   For instructions, see ***Using Internet Setup*** on page 65.

3. Configure a Dialup secondary Internet connection.

   For instructions, see ***Using Internet Setup*** on page 65.

Chapter 5

Managing Your Network

This chapter describes how to manage and configure your network connection and settings.

This chapter includes the following topics:

Configuring Network Settings

Warning: These are advanced settings. Do not change them unless it is necessary and you are qualified to do so.

Note: If you change the network settings to incorrect values and are unable to correct the error, you can reset the Safe@Office appliance to its default settings. See ***Resetting the Safe@Office appliance to Defaults*** on page 422.

Configuring a DHCP Server

500

By default, the Safe@Office appliance operates as a DHCP (Dynamic Host Configuration Protocol) server. This allows the Safe@Office appliance to automatically configure all the devices on your network with their network configuration details.

Note: The DHCP server only serves computers that are configured to obtain an IP address automatically. If a computer is not configured to obtain an IP address automatically, it is recommended to assign it an IP address outside of the DHCP address range. If you do assign it an IP address within the DHCP address range, the DHCP server will not assign this IP address to another computer.

If you already have a DHCP server in your internal network, and you want to use it instead of the Safe@Office DHCP server, you must disable the Safe@Office DHCP server, since you cannot have two DHCP servers or relays on the same network segment.

If you want to use a DHCP server on the Internet or via a VPN, instead of the Safe@Office DHCP server, you can configure DHCP relay. When in DHCP relay mode, the Safe@Office appliance relays information from the desired DHCP server to the devices on your network.

Note: You can perform DHCP reservation using network objects. For information, see ***Using Network Objects*** on page 131.

Enabling/Disabling the Safe@Office DHCP Server

500

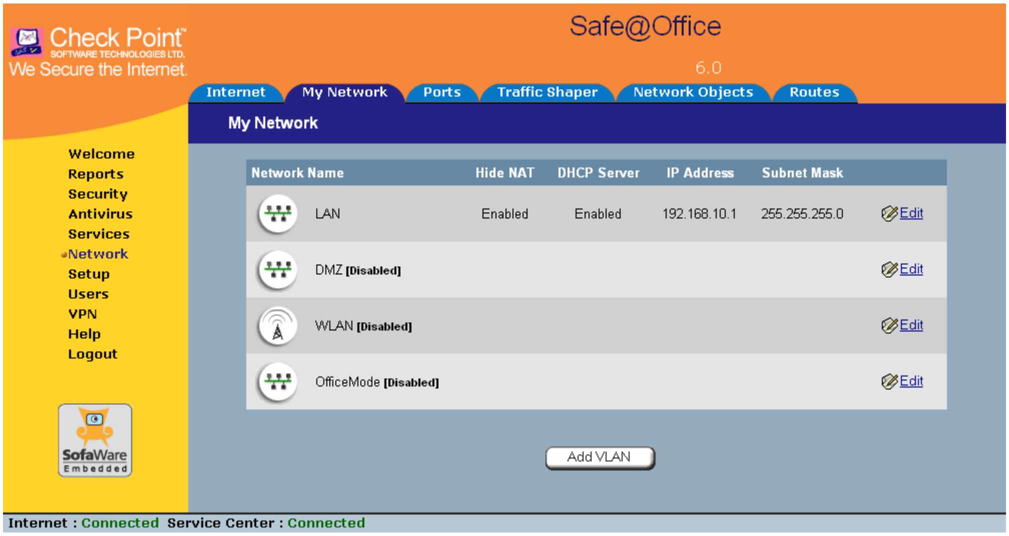
You can enable and disable the Safe@Office DHCP Server for internal networks.

Note: Enabling and disabling the DHCP Server is not available for the OfficeMode network.

To enable/disable the Safe@Office DHCP server

1. Click Network in the main menu, and click the My Network tab.

   The My Network page appears.

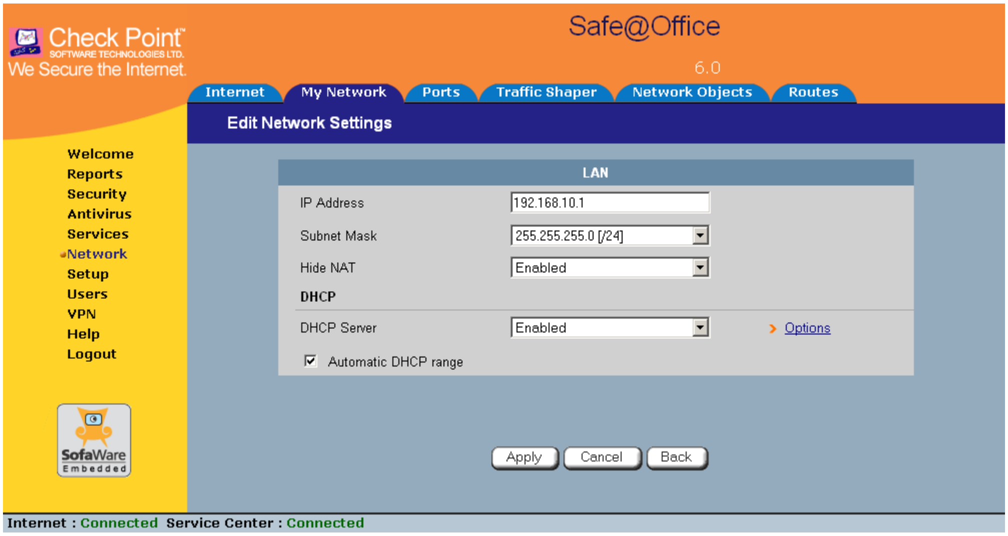


Network Name	Hide NAT	DHCP Server	IP Address	Subnet Mask	
LAN	Enabled	Enabled	192.168.10.1	255.255.255.0	Edit
DMZ **[Disabled]**					Edit
WLAN **[Disabled]**					Edit
OfficeMode **[Disabled]**					Edit

Internet : Connected Service Center : Connected

2. In the desired network's row, click Edit.

The **Edit Network Settings** page appears.



Edit Network Settings

LAN

IP Address	192.168.10.1
Subnet Mask	255.255.255.0 [/24]
Hide NAT	Enabled

DHCP

DHCP Server	Enabled

☑ Automatic DHCP range

Internet : Connected Service Center : Connected

3. From the **DHCP Server** list, select **Enabled** or **Disabled**.
4. Click **Apply**.

   A warning message appears.
5. Click **OK**.

   A success message appears
6. If your computer is configured to obtain its IP address automatically (using DHCP), and either the Safe@Office DHCP server or another DHCP server is enabled, restart your computer.

   If you enabled the DHCP server, your computer obtains an IP address in the DHCP address range.

Configuring the DHCP Address Range

500

By default, the Safe@Office DHCP server automatically sets the DHCP address range. The DHCP address range is the range of IP addresses that the DHCP server can assign to network devices. IP addresses outside of the DHCP address range are reserved for statically addressed computers.

If desired, you can set the Safe@Office DHCP range manually.

Note: Setting the DHCP range manually is not available for the OfficeMode network.

To configure the DHCP address range

1. Click **Network** in the main menu, and click the **My Network** tab.

   The **My Network** page appears.

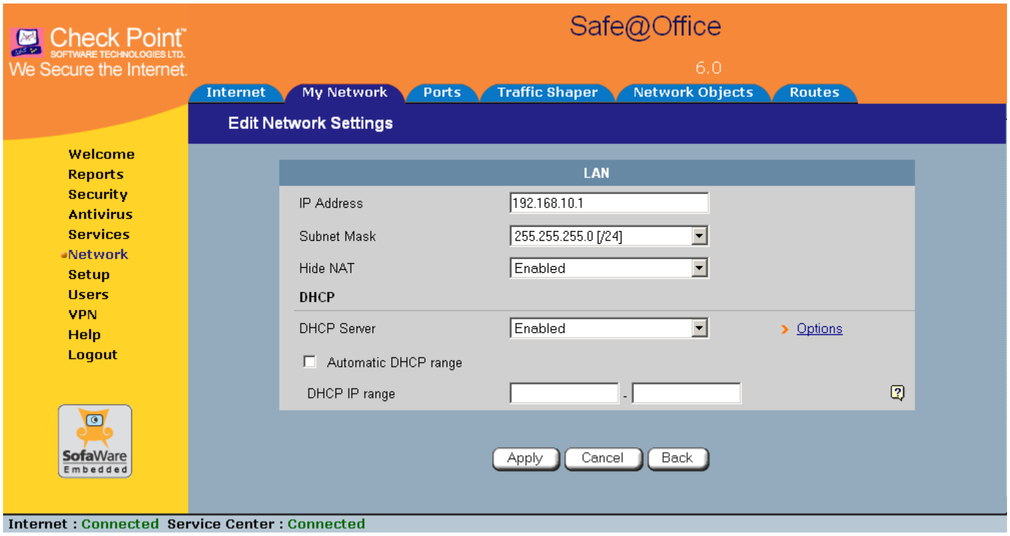
2. In the desired network's row, click **Edit.**

   The **Edit Network Settings** page appears.

3. To set the DHCP range manually:

   a. Clear the **Automatic DHCP range** check box.

The **DHCP IP range** fields appear.



Edit Network Settings

LAN

IP Address	192.168.10.1
Subnet Mask	255.255.255.0 [/24]
Hide NAT	Enabled

DHCP

DHCP Server	Enabled
□ Automatic DHCP range	
DHCP IP range	-

Internet : Connected Service Center : Connected

b. In the **DHCP IP range** fields, type the desired DHCP range.

4. To allow the DHCP server to set the IP address range, select the **Automatic DHCP range** check box.

5. Click **Apply**.

   A warning message appears.

6. Click **OK**.

   A success message appears

7. If your computer is configured to obtain its IP address automatically (using DHCP), and either the Safe@Office DHCP server or another DHCP server is enabled, restart your computer.

   Your computer obtains an IP address in the new DHCP address range.

Configuring DHCP Relay

500

You can configure DHCP relay for internal networks.

Note: DHCP relay will not work if the appliance is located behind a NAT device.

Note: Configuring DHCP options is not available for the OfficeMode network.

To configure DHCP relay

1. Click **Network** in the main menu, and click the **My Network** tab.

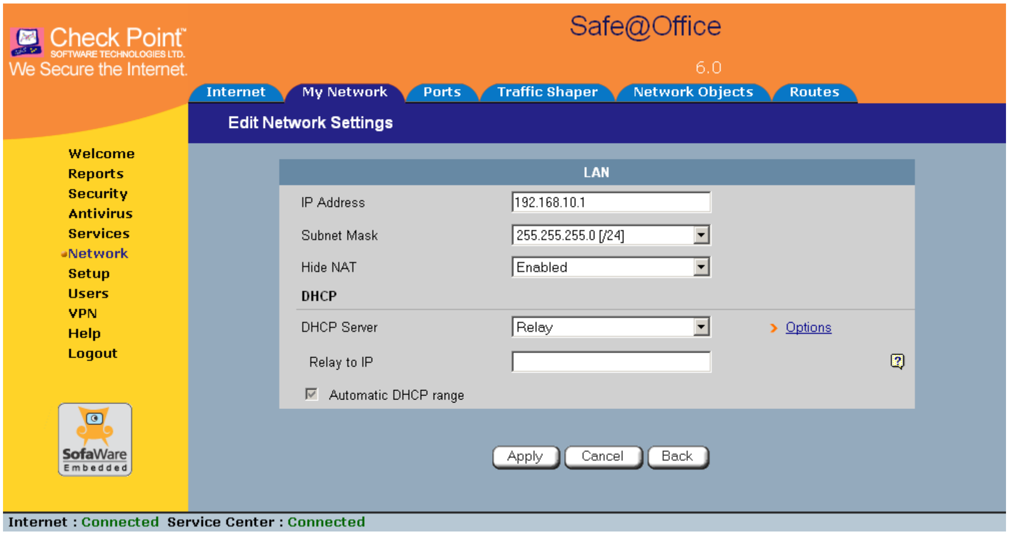
   The **My Network** page appears.

2. In the desired network's row, click **Edit**.

   The **Edit Network Settings** page appears.

3. In the **DHCP Server** list, select **Relay**.

The **Automatic DHCP range** check box is disabled, and the **Relay to IP** field appears.



Edit Network Settings

LAN

IP Address	192.168.10.1
Subnet Mask	255.255.255.0 [/24]
Hide NAT	Enabled

DHCP

DHCP Server	Relay
Relay to IP	

☑ Automatic DHCP range

Internet : Connected Service Center : Connected

4. In the **Relay to IP** field, type the IP address of the desired DHCP server.
5. Click **Apply**.

   A warning message appears.
6. Click **OK**.

   A success message appears
7. If your computer is configured to obtain its IP address automatically (using DHCP), and either the Safe@Office DHCP server or another DHCP server is enabled, restart your computer.

   Your computer obtains an IP address in the DHCP address range.

Configuring DHCP Server Options

500

If desired, you can configure the following custom DHCP options for an internal network:

- Domain suffix
- DNS servers
- WINS servers
- NTP servers
- VoIP call managers
- TFTP server and boot filename

Note: Configuring DHCP options is not available for the DMZ or VLANs.

To configure DHCP options

1. Click Network in the main menu, and click the My Network tab.

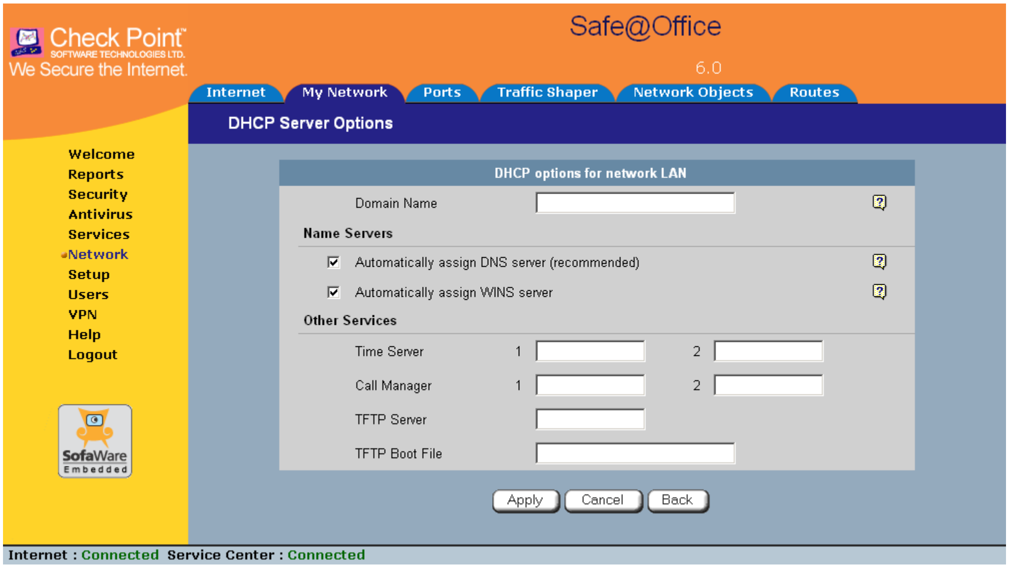
   The My Network page appears.

2. In the desired network's row, click Edit.

   The Edit Network Settings page appears.

3. In the DHCP area, click Options.

The **DHCP Server Options** page appears.



DHCP Server Options

DHCP options for network LAN

Domain Name

Name Servers

☑ Automatically assign DNS server (recommended)

☑ Automatically assign WINS server

Other Services

Time Server 1 2

Call Manager 1 2

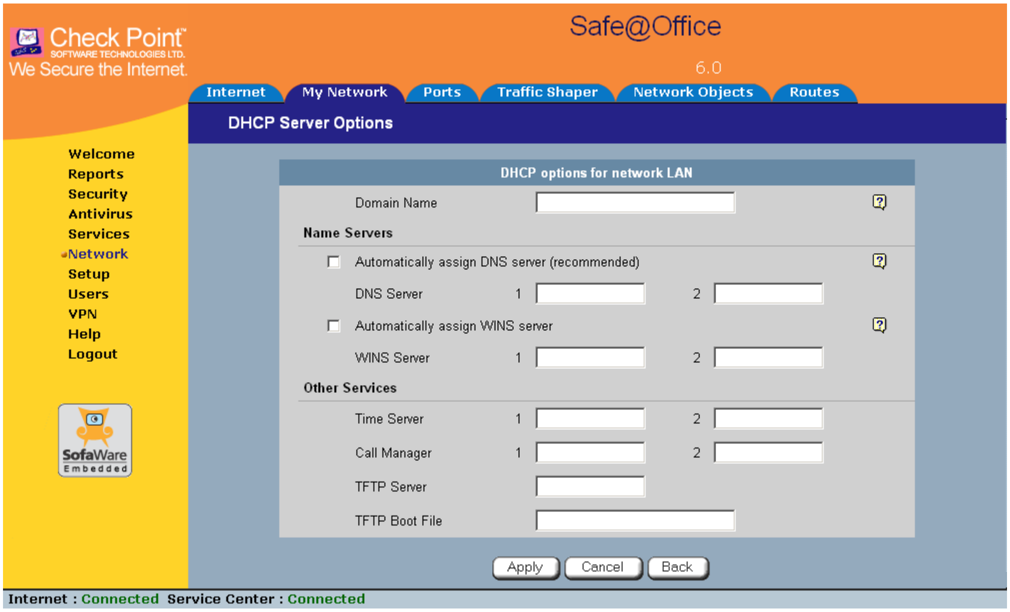
TFTP Server

TFTP Boot File

Internet : Connected Service Center : Connected

4. Complete the fields using the relevant information in the table below.

New fields appear, depending on the check boxes you selected.



DHCP Server Options

DHCP options for network LAN

Domain Name

Name Servers

□ Automatically assign DNS server (recommended)

DNS Server 1 2

□ Automatically assign WINS server

WINS Server 1 2

Other Services

Time Server 1 2

Call Manager 1 2

TFTP Server

TFTP Boot File

Internet : Connected Service Center : Connected

5. Click Apply.
6. If your computer is configured to obtain its IP address automatically (using DHCP), restart your computer.

   Your computer obtains an IP address in the DHCP address range.

Table 13: DHCP Server Options Fields

In this field…	Do this…
Domain Name	Type a default domain suffix that should be passed to DHCP clients. The DHCP client will automatically append the domain suffix for the resolving of non-fully qualified names. For example, if the domain suffix is set to "mydomain.com", and the client tries to resolve the name “mail”, the suffix will be automatically appended to the name, resulting in “mail.mydomain.com”.

In this field…	Do this…
Name Servers	
Automatically assign DNS server (recommended)	Clear this option if you do not want the gateway to act as a DNS relay server and pass its own IP address to DHCP clients. Normally, it is recommended to leave this option selected. The DNS Server 1 and DNS Server 2 fields appear.
DNS Server 1, 2	Type the IP addresses of the Primary and Secondary DNS servers to pass to DHCP clients instead of the gateway.
Automatically assign WINS server	Clear this option if you do not want DHCP clients to be assigned the same WINS servers as specified by the Internet connection configuration (in the Internet Setup page). The WINS Server 1 and WINS Server 2 fields appear.
WINS Server 1, 2	Type the IP addresses of the Primary and Secondary WINS servers to use instead of the gateway.
Other Services	These fields are not available for the OfficeMode network.
Time Server 1, 2	To use Network Time Protocol (NTP) servers to synchronize the time on the DHCP clients, type the IP address of the Primary and Secondary NTP servers.
Call Manager 1, 2	To assign Voice over Internet Protocol (VoIP) call managers to the DHCP clients, type the IP address of the Primary and Secondary VoIP servers.

In this field...	Do this...
TFTP Server	Trivial File Transfer Protocol (TFTP) enables booting diskless computers over the network. To assign a TFTP server to the DHCP clients, type the IP address of the TFTP server.
TFTP Boot File	Type the boot file to use for booting DHCP clients via TFTP.

Changing IP Addresses

500

If desired, you can change your Safe@Office appliance’s internal IP address, or the entire range of IP addresses in your internal network. You may want to perform these tasks if, for example, you are adding the Safe@Office appliance to a large existing network and don't want to change that network’s IP address range, or if you are using a DHCP server other than the Safe@Office appliance, that assigns addresses within a different range.

To change IP addresses

1. Click **Network** in the main menu, and click the **My Network** tab.

   The **My Network** page appears.

2. In the LAN network's row, click **Edit**.

   The **Edit Network Settings** page appears.

3. To change the Safe@Office appliance’s internal IP address, enter the new IP address in the **IP Address** field.

4. To change the internal network range, enter a new value in the **Subnet Mask** field.

Note: The internal network range is defined both by the Safe@Office appliance’s internal IP address and by the subnet mask.

For example, if the Safe@Office appliance’s internal IP address is 192.168.100.7, and you set the subnet mask to 255.255.255.0, the network’s IP address range will be 192.168.100.1 – 192.168.100.254.

The default internal network range is 192.168.10.*.

5. Click Apply.

   A warning message appears.

6. Click OK.

   - The Safe@Office appliance's internal IP address and/or the internal network range are changed.
   - A success message appears.

7. Do one of the following:

   - If your computer is configured to obtain its IP address automatically (using DHCP), and the Safe@Office DHCP server is enabled, restart your computer.

     Your computer obtains an IP address in the new range.

   - Otherwise, manually reconfigure your computer to use the new address range using the TCP/IP settings. For information on configuring TCP/IP, see ***TCP/IP Settings*** on page 26, on page 22.

Enabling/Disabling Hide NAT

500

Hide Network Address Translation (Hide NAT) enables you to share a single public Internet IP address among several computers, by "hiding" the private IP addresses of the internal computers behind the Safe@Office appliance's single Internet IP address.

Note: If Hide NAT is disabled, you must obtain a range of Internet IP addresses from your ISP. Hide NAT is enabled by default.

Note: Static NAT and Hide NAT can be used together.

To enable/disable Hide NAT

1. Click Network in the main menu, and click the My Network tab.

   The My Network page appears.

2. In the desired network's row, click Edit.

   The Edit Network Settings page appears.

3. From the Hide NAT list, select Enabled or Disabled.
4. Click Apply.

   A warning message appears.

5. Click OK.

   - If you chose to disable Hide NAT, it is disabled.
   - If you chose to enable Hide NAT, it is enabled.

Configuring a DMZ Network

500

In addition to the LAN network, you can define a second internal network called a DMZ (demilitarized zone) network.

For information on default security policy rules controlling traffic to and from the DMZ, see ***Default Security Policy*** on page 205.

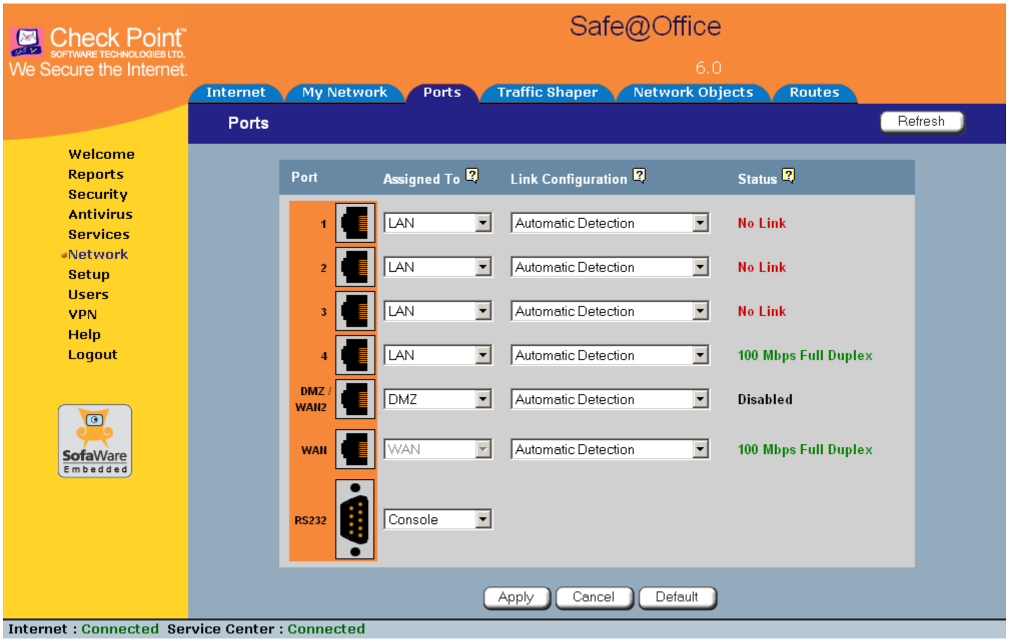
To configure a DMZ network

1. Connect the DMZ computer to the DMZ port.

   If you have more than one computer in the DMZ network, connect a hub or switch to the DMZ port, and connect the DMZ computers to the hub.

2. Click Network in the main menu, and click the Ports tab.

   The Ports page appears.



Ports

Port	Assigned To	Link Configuration	Status
1	LAN	Automatic Detection	No Link
2	LAN	Automatic Detection	No Link
3	LAN	Automatic Detection	No Link
4	LAN	Automatic Detection	100 Mbps Full Duplex
DMZ / WAN2	DMZ	Automatic Detection	Disabled
WAN	WAN	Automatic Detection	100 Mbps Full Duplex
RS232	Console		

Internet : Connected Service Center : Connected

3. In the **DMZ** drop-down list, select **DMZ**.
4. Click **Apply**.
5. Click **Network** in the main menu, and click the **My Network** tab.

   The **My Network** page appears.
6. In the DMZ network's row, click **Edit**.

   The **Edit Network Settings** page appears.
7. In the **Mode** drop-down list, select **Enabled**.

   The fields are enabled.
8. If desired, enable or disable Hide NAT.

   See ***Enabling/Disabling Hide NAT*** on page 109.
9. If desired, configure a DHCP server.

   See ***Configuring a DHCP Server*** on page 96.
10. In the **IP Address** field, type the IP address of the DMZ network's default gateway.

Note: The DMZ network must not overlap other networks.

11. In the **Subnet Mask** text box, type the DMZ’s internal network range.
12. Click **Apply**.

    A warning message appears.
13. Click **OK**.

    A success message appears.

Configuring the OfficeMode Network

500

By default, VPN Clients connect to the VPN Server using an Internet IP address locally assigned by an ISP. This may lead to the following problems:

- VPN Clients on the same network will be unable to communicate with each other via the Safe@Office Internal VPN Server. This is because their IP addresses are on the same subnet, and they therefore attempt to communicate directly over the local network, instead of through the secure VPN link.
- Some networking protocols or resources may require the client's IP address to be an internal one.

OfficeMode solves these problems by enabling the Safe@Office DHCP Server to automatically assign a unique local IP address to the VPN client, when the client connects and authenticates. The IP addresses are allocated from a pool called the *OfficeMode network*.

Note: OfficeMode requires Check Point SecureClient to be installed on the VPN clients. It is not supported by Check Point SecuRemote.

When OfficeMode is not supported by the VPN client, traditional mode will be selected used instead.

To configure the OfficeMode network

1. Click **Network** in the main menu, and click the **My Network** tab.

   The **My Network** page appears.

2. In the **OfficeMode** network's row, click **Edit**.

   The **Edit Network Settings** page appears.

3. In the **Mode** drop-down list, select **Enabled.**

   The fields are enabled.

4. In the IP Address field, type the IP address to use as the OfficeMode network's default gateway.

Note: The OfficeMode network must not overlap other networks.

5. In the Subnet Mask text box, type the OfficeMode internal network range.
6. If desired, enable or disable Hide NAT.

   See ***Enabling/Disabling Hide NAT*** on page 109.

7. If desired, configure DHCP options.

   See ***Configuring DHCP Server Options*** on page 103.

8. Click Apply.

   A warning message appears.

9. Click OK.

   A success message appears.

Configuring VLANs

Power Pack

Your Safe@Office appliance allows you partition your network into several virtual LAN networks (VLANs). A VLAN is a logical network behind the Safe@Office appliance. Computers in the same VLAN behave as if they were on the same physical network: traffic flows freely between them, without passing through a firewall. In contrast, traffic between a VLAN and other networks passes through the firewall and is subject to the security policy. By default, traffic from a VLAN to any other internal network (including other VLANs) is blocked. In this way, defining VLANs can increase security and reduce network congestion.

For example, you can assign each division within your organization to a different VLAN, regardless of their physical location. The members of a division will be able to communicate with each other and share resources, and only members who need to communicate with other divisions will be allowed to do so. Furthermore, you can easily transfer a member of one division to another division without rewiring your network, by simply reassigning them to the desired VLAN.

The Safe@Office appliance supports the following VLAN types:

- Tag-based

  In tag-based VLAN you use one of the gateway's ports as a 802.1Q VLAN trunk, connecting the appliance to a VLAN-aware switch. Each VLAN behind the trunk is assigned an identifying number called a "VLAN ID", also referred to as a "VLAN tag". All outgoing traffic from a tag-based VLAN contains the VLAN's tag in the packet headers. Incoming traffic to the VLAN must contain the VLAN's tag as well, or the packets are dropped. Tagging ensures that traffic is directed to the correct VLAN.

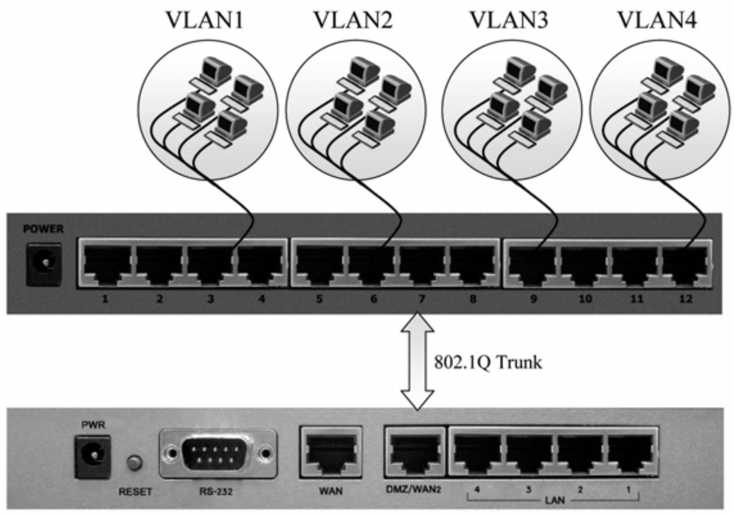


Figure 10: Tag-based VLAN

- Port-based

  Port-based VLAN allows assigning the appliance's LAN ports to VLANs, effectively transforming the appliance's four-port switch into up to four firewall-isolated security zones. You can assign multiple ports to the same VLAN, or each port to a separate VLAN.

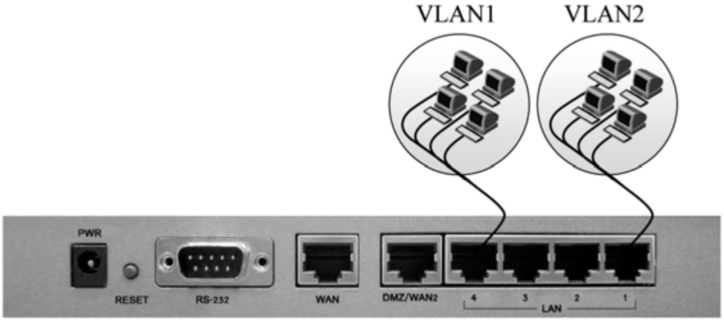


Figure 11: Port-based VLAN

Port-based VLAN does not require an external VLAN-capable switch, and is therefore simpler to use than tag-based VLAN. However, port-based VLAN is limited, because the appliance's internal switch has only four ports.

You can define up to ten VLAN networks (port-based and tag-based combined).

For information on the default security policy for VLANs, see ***Default Security Policy*** on page 205.

Adding and Editing Port-Based VLANs

Power Pack

To add or edit a port-based VLAN

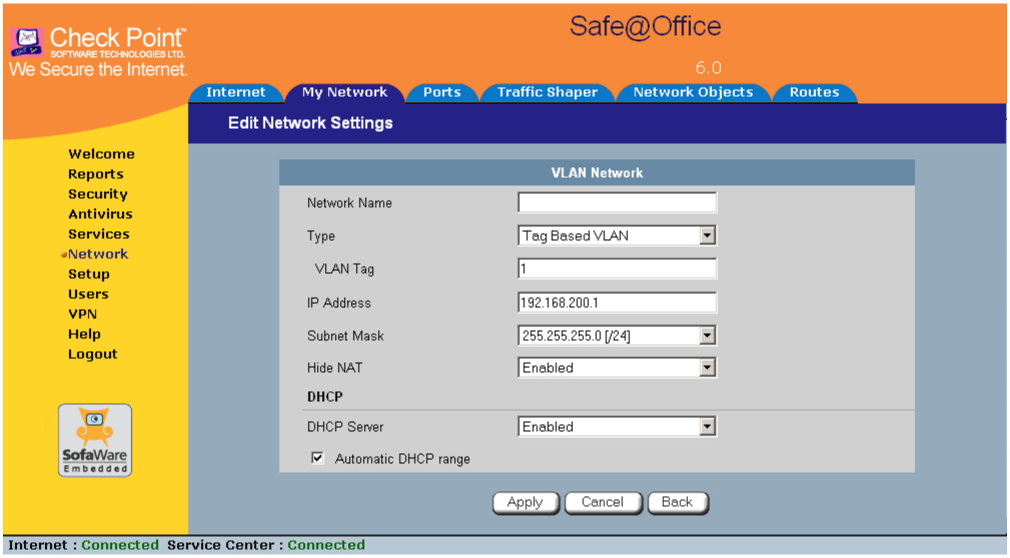
1. Click **Network** in the main menu, and click the **My Network** tab.

   The **My Network** page appears.

2. Do one of the following:

   - To add a VLAN site, click **Add VLAN**.
   - To edit a VLAN site, click **Edit** in the desired VLAN's row.

   The **Edit Network Settings** page for VLAN networks appears.



Edit Network Settings

VLAN Network

Network Name	
Type	Tag Based VLAN
VLAN Tag	1
IP Address	192.168.200.1
Subnet Mask	255.255.255.0 [/24]
Hide NAT	Enabled

DHCP

DHCP Server	Enabled

☑ Automatic DHCP range

Internet : Connected Service Center : Connected

3. In the **Network Name** field, type a name for the VLAN.

4. In the **Type** drop-down list, select **Port Based VLAN**.

   The **VLAN Tag** field disappears.

5. In the IP Address field, type the IP address of the VLAN network's default gateway.

Note: The VLAN network must not overlap other networks.

6. In the Subnet Mask field, type the VLAN's internal network range.
7. If desired, enable or disable Hide NAT.

   See ***Enabling/Disabling Hide NAT*** on page 109.
8. If desired, configure a DHCP server.

   See ***Configuring a DHCP Server*** on page 96.
9. Click Apply.

   A warning message appears.
10. Click OK.

    A success message appears.
11. Click Network in the main menu, and click the Ports tab.

    The Ports page appears.
12. In the drop-down list next to the LAN port you want to assign, select the VLAN network's name.

    You can assign more than one port to the VLAN.
13. Click Apply.

Adding and Editing Tag-Based VLANs

Power Pack

To add or edit a tag-based VLAN

1. Click **Network** in the main menu, and click the **My Network** tab.

   The **My Network** page appears.

2. Do one of the following:

   - To add a VLAN site, click **Add VLAN**.
   - To edit a VLAN site, click **Edit** in the desired VLAN’s row.

   The **Edit Network Settings** page for VLAN networks appears.

3. In the **Network Name** field, type a name for the VLAN.

4. In the **Type** drop-down list, select **Tag Based VLAN**.

   The **VLAN Tag** field appears.

5. In the **VLAN Tag** field, type a tag for the VLAN.

   This must be an integer between 1 and 4095.

6. In the **IP Address** field, type the IP address of the VLAN network's default gateway.

Note: The VLAN network must not overlap other networks.

7. In the **Subnet Mask** field, type the VLAN's internal network range.

8. If desired, enable or disable Hide NAT.

   See ***Enabling/Disabling Hide NAT*** on page 109.

9. If desired, configure a DHCP server.

   See ***Configuring a DHCP Server*** on page 96.

10. Click **Apply**.

    A warning message appears.

11. Click **OK**.

    A success message appears.

12. Click **Network** in the main menu, and click the **Ports** tab.

    The **Ports** page appears.

13. In the **DMZ/WAN2** drop-down list, select **VLAN Trunk**.

14. Click **Apply**.

    The DMZ/WAN2 port now operates as a VLAN Trunk port. In this mode, it will not accept untagged packets.

15. Configure a VLAN trunk (802.1Q) port on the VLAN-aware switch, according to the vendor instructions. Define the same VLAN IDs on the switch.

16. Connect the Safe@Office appliance's DMZ/WAN2 port to the VLAN-aware switch's VLAN trunk port.

Deleting VLANs

Power Pack

To delete a VLAN

1. If the VLAN is port-based, do the following:
   1. Click **Network** in the main menu, and click the **Ports** tab.

      The **Ports** page appears.
   2. Remove all port assignments to the VLAN, by selecting other networks in the drop-down lists.
   3. Click **Apply**.
2. Click **Network** in the main menu, and click the **My Network** tab.

   The **My Network** page appears.
3. In the desired VLAN's row, click the Erase 🗑 icon.

   A confirmation message appears.
4. Click **OK**.

   The VLAN is deleted.

Configuring High Availability

Power Pack

You can create a High Availability (HA) cluster consisting of two or more Safe@Office appliances. For example, you can install two Safe@Office appliances on your network, one acting as the “Master”, the default gateway through which all network traffic is routed, and one acting as the “Backup”. If the Master fails, the Backup automatically and transparently takes over all the roles of the Master. This ensures that your network is consistently protected by a Safe@Office appliance and connected to the Internet.

The gateways in a HA cluster each have a separate IP address within the local network. In addition, the gateways share a single virtual IP address, which is the default gateway address for the local network. Control of the virtual IP address is passed as follows:

1. Each gateway is assigned a priority, which determines the gateway's role: the gateway with the highest priority is the Active Gateway and uses the virtual IP address, and the rest of the gateways are Passive Gateways.
2. The Active Gateway sends periodic signals, or “heartbeats”, to the network via a synchronization interface.

   The synchronization interface can be any internal network existing on both gateways except the WLAN.
3. If the heartbeat from the Active Gateway stops (indicating that the Active gateway has failed), the gateway with the highest priority becomes the new Active Gateway and takes over the virtual IP address.
4. When a gateway that was offline comes back online, or a gateway's priority changes, the gateway sends a heartbeat notifying the other gateways in the cluster.

   If the gateway's priority is now the highest, it becomes the Active Gateway.

The Safe@Office appliance supports Internet connection tracking, which means that each appliance tracks its Internet connection's status and reduces its own priority by a user-specified amount, if its Internet connection goes down. If the Active Gateway's priority drops below another gateway's priority, then the other gateway becomes the Active Gateway.

Note: You can force a fail-over to a passive Safe@Office appliance. You may want to do this in order to verify that HA is working properly, or if the active Safe@Office appliance needs repairs. To force a fail-over, switch off the primary box or disconnect it from the LAN network.

The Safe@Office appliance supports configuring multiple HA clusters on the same network segment. To this end, each cluster must be assigned a unique ID number.

When HA is configured, you can specify that only the Active Gateway in the cluster should connect to the Internet. This is called WAN HA, and it is useful in the following situations:

- Your Internet subscription cost is based is on connection time, and therefore having the Passive appliance needlessly connected to the Internet costs you money.
- You want multiple appliances to share the same static IP address without creating an IP address conflict.

WAN HA avoids an IP address change, and thereby ensures virtually uninterrupted access from the Internet to internal servers at your network.

Before configuring HA, the following requirements must be met:

- You must have at least two identical Safe@Office appliances.
- The appliances must have identical firmware versions and firewall rules.
- The appliances' internal networks must be the same.
- The appliances must have *different* real internal IP addresses, but share *the same* virtual IP address.
- The appliances' synchronization interface ports must be connected either directly, or via a hub or a switch. For example, if the DMZ is the synchronization interface, then the DMZ/WAN2 ports on the appliances must be connected to each other.

  The synchronization interface need not be dedicated for synchronization only. It may be shared with an active internal network.

You can configure HA for any internal network, except the OfficeMode network.

Note: You can enable the DHCP server in all Safe@Office appliances. A Passive Gateway’s DHCP server will start answering DHCP requests only if the Active Gateway fails.

Note: If you configure HA for the WLAN network:

- A passive appliance's wireless transmitter will be disabled until the gateway becomes active.
- The two WLAN networks can share the same SSID and wireless frequency.
- The WLAN interface cannot serve as the synchronization interface.

Configuring High Availability on a Gateway

Power Pack

The following procedure explains how to configure HA on a single gateway. You must perform this procedure on each Safe@Office appliance that you want to include in the HA cluster.

To configure HA on a Safe@Office appliance

1. Set the appliance’s internal IP addresses and network range.

   Each appliance must have a different internal IP address.

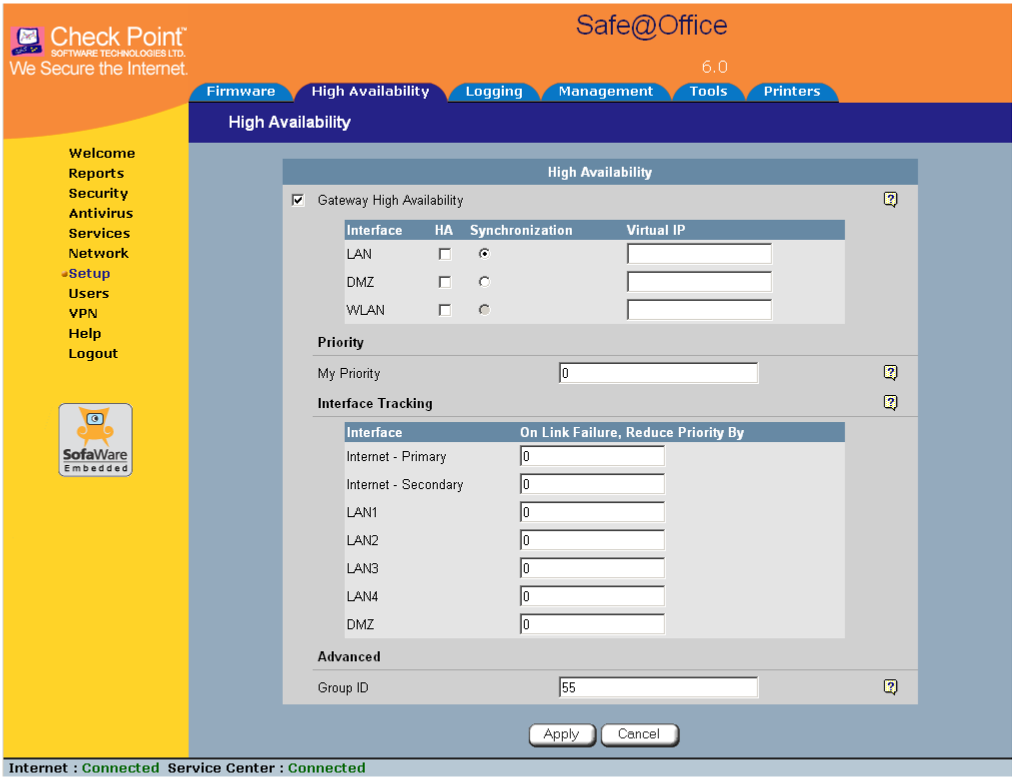
   See ***Changing IP Addresses*** on page 107.

2. Click Setup in the main menu, and click the High Availability tab.

   The High Availability page appears.

3. Select the Gateway High Availability check box.

The fields are enabled.



High Availability

High Availability

☑ Gateway High Availability

Interface	HA	Synchronization	Virtual IP
LAN	□	●	
DMZ	□	○	
WLAN	□	○	

Priority

My Priority: 0

Interface Tracking

Interface	On Link Failure, Reduce Priority By
Internet - Primary	0
Internet - Secondary	0
LAN1	0
LAN2	0
LAN3	0
LAN4	0
DMZ	0

Advanced

Group ID: 55

Internet : Connected Service Center : Connected

4. Next to each network for which you want to enable HA, select the HA check box.
5. In the Virtual IP field, type the default gateway IP address.

   This can be any unused IP address in the network, and must be the same for all gateways.
6. Click the Synchronization radio button next to the network you want to use as the synchronization interface.

   You can choose any network listed except the WLAN.

Note: The synchronization interface must be the same for all gateways, and must always be connected and enabled on all gateways. Otherwise, multiple appliances may become active, causing unpredictable problems.

7. Complete the fields using the information the table below.
8. Click Apply.

   A success message appears.
9. If desired, configure WAN HA for both the primary and secondary Internet connection.

   This setting should be the same for all gateways. For further information, see ***Using Internet Setup*** on page 65.

Table 14: High Availability Page Fields

In this field...	Do this...
Priority	
My Priority	Type the gateway's priority. This must be an integer between 1 and 255.
Interface Tracking	
Internet - Primary	Type the amount to reduce the gateway's priority if the primary Internet connection goes down. This must be an integer between 0 and 255.

In this field…	Do this…
Internet - Secondary	Type the amount to reduce the gateway's priority if the secondary Internet connection goes down. This must be an integer between 0 and 255. Note: This value is only relevant if you configured a backup connection. For information on configuring a backup connection, see ***Configuring a Backup Internet Connection*** on page 92.
LAN1/2/3/4	Type the amount to reduce the gateway's priority if the LAN port's Ethernet link is lost.
DMZ	Type the amount to reduce the gateway's priority if the DMZ / WAN2 port's Ethernet link is lost.
Advanced	
Group ID	If multiple HA clusters exist on the same network segment, type the ID number of the cluster to which the gateway should belong. This must be an integer between 1 and 255. The default value is 55. If only one HA cluster exists, there is no need to change this value.

Sample Implementation on Two Gateways

Power Pack

The following procedure illustrates how to configure HA for the following two Safe@Office gateways, Gateway A and Gateway B:

Table 15: Gateway Details

	Gateway A	Gateway B
Internal Networks	LAN, DMZ	LAN, DMZ
Internet Connections	Primary and secondary	Primary only
LAN Network IP Address	192.169.100.1	192.169.100.2
LAN Network Subnet Mask	255.255.255.0	255.255.255.0
DMZ Network IP Address	192.169.101.1	192.169.101.2
DMZ Network Subnet Mask	255.255.255.0	255.255.255.0

The gateways have two internal networks in common, LAN and DMZ. This means that you can configure HA for the LAN network, the DMZ network, or both. You can use either of the networks as the synchronization interface.

The procedure below shows how to configure HA for both the LAN and DMZ networks. The synchronization interface is the DMZ network, the LAN virtual IP address is 192.168.100.3, and the DMZ virtual IP address is 192.168.101.3. Gateway A is the Active Gateway.

To configure HA for Gateway A and Gateway B

1. Connect the LAN port of Gateways A and B to hub 1.

2. Connect the DMZ port of Gateways A and B to hub 2.
3. Connect the LAN network computers of Gateways A and B to hub 1.
4. Connect the DMZ network computers of Gateways A and B to hub 2.
5. Do the following on Gateway A:

    a. Set the gateway's internal IP addresses and network range to the values specified in the table above.

       See ***Changing IP Addresses*** on page 107.

    b. Click Setup in the main menu, and click the High Availability tab.

       The High Availability page appears.

    c. Select the Gateway High Availability check box.

       The Gateway High Availability area is enabled. The LAN and DMZ networks are listed.

    d. Next to LAN, select the HA check box.

    e. In the LAN network's Virtual IP field, type the default gateway IP address 192.168.100.3.

    f. Next to DMZ, select the HA check box.

    g. In the DMZ network's Virtual IP field, type the default gateway IP address 192.168.101.3.

    h. Click the Synchronization radio button next to DMZ.

    i. In the My Priority field, type "100".

       The high priority means that Gateway A will be the Active Gateway.

    j. In the Internet - Primary field, type "20".

       Gateway A will reduce its priority by 20, if its primary Internet connection goes down.

    k. In the Internet - Secondary field, type "30".

Gateway A will reduce its priority by 30, if its secondary Internet connection goes down.

l. Click **Apply**.

   A success message appears.

6. Do the following on Gateway B:

   a. Set the gateway's internal IP addresses and network range to the values specified in the table above.

      See ***Changing IP Addresses*** on page 107.

   b. Click **Setup** in the main menu, and click the **High Availability** tab.

      The **High Availability** page appears.

   c. Select the **Gateway High Availability** check box.

      The **Gateway High Availability** area is enabled. The LAN and DMZ networks are listed.

   d. Next to **LAN**, select the **HA** check box.

   e. In the LAN network's **Virtual IP** field, type the default gateway IP address 192.168.100.3.

   f. Next to **DMZ**, select the **HA** check box.

   g. In the DMZ network's **Virtual IP** field, type the default gateway IP address 192.168.101.3.

   h. Click the **Synchronization** radio button next to **DMZ**.

   i. In the **My Priority** field, type "60".

      The low priority means that Gateway B will be the Passive Gateway.

   j. In the **Internet - Primary** field, type "20".

      Gateway B will reduce its priority by 20, if its Internet connection goes down.

   k. Click **Apply**.

      A success message appears.

Gateway A's priority is 100, and Gateway B's priority is 60. So long as one of Gateway A's Internet connections is up, Gateway A is the Active Gateway, because its priority is higher than that of Gateway B.

If both of Gateway A's Internet connections are down, it deducts from its priority 20 (for the primary connection) and 30 (for the secondary connection), reducing its priority to 50. In this case, Gateway B's priority is the higher priority, and it becomes the Active Gateway.

You can add individual computers or networks as network objects. This enables you to configure various settings for the computer or network represented by the network object.

You can configure the following settings for a network object:

- Static NAT (or One-to-One NAT)

  Static NAT allows the mapping of Internet IP addresses or address ranges to hosts inside the internal network. This is useful if you want a computer in your private network to have its own Internet IP address. For example, if you have both a mail server and a Web server in your network, you can map each one to a separate Internet IP address.

  Static NAT rules do not imply any security rules. To allow incoming traffic to a host for which you defined Static NAT, you must create an Allow rule. When specifying firewall rules for such hosts, use the host’s internal IP address, and not the Internet IP address to which the internal IP address is mapped. For further information, see ***Using Rules*** on page 211.

Note: Static NAT and Hide NAT can be used together.

Note: The Safe@Office appliance supports Proxy ARP (Address Resolution Protocol). When an external source attempts to communicate with such a computer, the Safe@Office appliance automatically replies to ARP queries with its own MAC address, thereby enabling communication. As a result, the Static NAT Internet IP addresses appear to external sources to be real computers connected to the WAN interface.

- Assign the network object's IP address to a MAC address

  Normally, the Safe@Office DHCP server consistently assigns the same IP address to a specific computer. However, if the Safe@Office DHCP server runs out of IP addresses and the computer is down, then the DHCP server may reassign the IP address to a different computer.

  If you want to guarantee that a particular computer's IP address remains constant, you can reserve the IP address for use by the computer's MAC address only. This is called *DHCP reservation*, and it is useful if you are hosting a public Internet server on your network.

- Secure HotSpot enforcement

  In Safe@Office 500 with Power Pack, you can specify whether or not to exclude the network object from HotSpot enforcement. Excluded network objects will be able to access the network without viewing the My HotSpot page. For further information on Secure HotSpot, see ***Configuring Secure HotSpot*** on page 258.

Adding and Editing Network Objects

500

You can add or edit network objects via:

- The Network Objects page

  This page enables you to add both individual computers and networks.

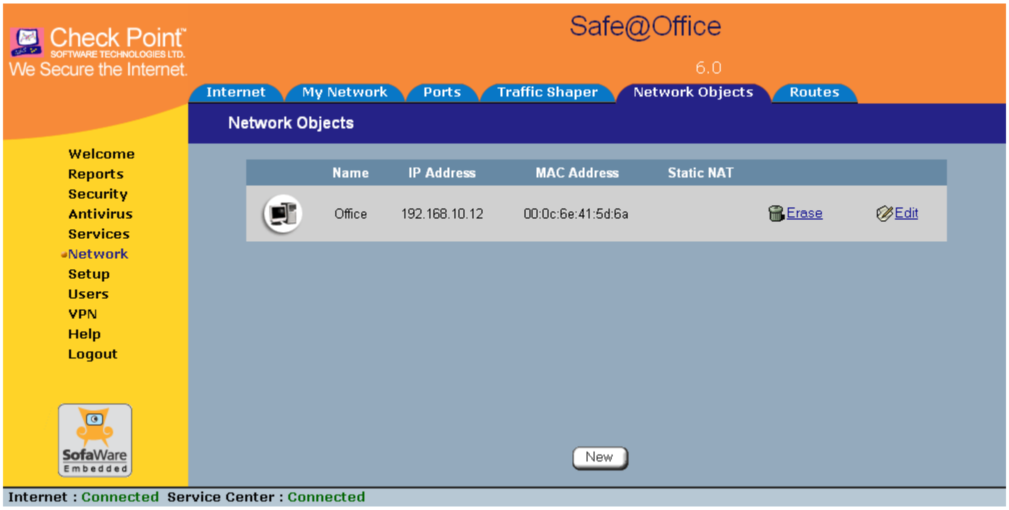
- The Active Computers page

  This page enables you to add only individual computers as network objects. The computer's details are filled in automatically in the wizard.

To add or edit a network object via the Network Objects page

7. Click **Network** in the main menu, and click the **Network Objects** tab.

   The **Network Objects** page appears with a list of network objects.



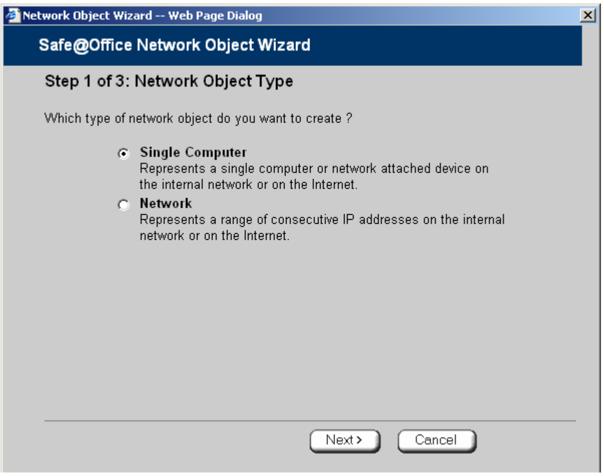
Name	IP Address	MAC Address	Static NAT		
Office	192.168.10.12	00:0c:6e:41:5d:6a		Erase	Edit

Internet : Connected Service Center : Connected

8. Do one of the following:

   - To add a network object, click **New**.
   - To edit an existing network object, click **Edit** next to the desired computer in the list.

The **Safe@Office Network Object Wizard** opens, with the **Step 1: Network Object Type** dialog box displayed.



Network Object Wizard -- Web Page Dialog
Safe@Office Network Object Wizard

Step 1 of 3: Network Object Type

Which type of network object do you want to create ?

● **Single Computer**
Represents a single computer or network attached device on the internal network or on the Internet.

○ **Network**
Represents a range of consecutive IP addresses on the internal network or on the Internet.

9. Do one of the following:

   - To specify that the network object should represent a single computer or device, click **Single Computer**.
   - To specify that the network object should represent a network, click **Network**.

10. Click **Next**.