

Gigaset®

SE567/SE568 Series Residential Gateway User's Guide



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Chapter 1

Introduction



This chapter provides an overview of the Gateway's features and capabilities.

Congratulations on the purchase of your new Gigaset SE567/SE568 Series Residential Gateway (Gateway). The Gateway is a multi-function device providing the following services:

- Built-in DSL Modem that provides shared Internet access for multiple users.
- One- or four-port 10/100 Ethernet Switch for 10Base-T or 100Base-T connections.
- Custom Controls that allow you to configure the Gigaset Residential Gateway to best meet your specific security and Internet-sharing needs.
- Integrated 802.11g/802.11b wireless interface that provides a wireless interface built into the unit.

Features of the Residential Gateway

The Gigaset SE567/SE568 Series Gateway incorporates many advanced features, carefully designed to provide sophisticated functions while being easy to use.

Network (LAN) Features

One- or Four-Port 10/100 Ethernet Switch

The Gigaset Gateway incorporates a one- or four-port 10/100 Ethernet switch, making it easy to create or extend your network. Optionally, you can configure the fourth port as a WAN port for connection to another broadband device.

DHCP Server Support

Dynamic Host Configuration Protocol (DHCP) provides a dynamic, "upon request," IP address to computers and other networked devices. Your Gigaset Gateway can act as a DHCP Server for devices on your local network.

Network Status and Statistics

Using these diagnostic tools, you can easily monitor the status of each network connection and evaluate network performance.

USB Connection

Some Gateways will have a Universal Serial Bus (USB) connection that can be used to connect up to 127 peripheral devices, such as mice, modems, and keyboards. It also supports UPnP installation and hot plugging.

Security Features

Password Protected Configuration

Password protection is provided to prevent unauthorized users from modifying the Gateway's configuration data and settings.

NAT Protection

An intrinsic side affect of NAT (Network Address Translation) technology is that by allowing all your network users to share a single IP address, the location and even the existence of each computer is hidden. From the external viewpoint, there is no network, only a single device - the Gigaset Gateway.

Stateful Inspection Firewall

All incoming data packets are monitored and all incoming server requests are filtered, thus protecting your network from malicious attacks from external sources.

Attack Protection System

Attacks can flood your Internet connection with invalid data packets and connection requests, using so much bandwidth and so many resources that Internet access becomes unavailable. The Gateway incorporates protection against these types of attacks as well as other common hacker attacks.

Configuration & Management

Easy Setup

Use your Web browser for quick and easy configuration.

• UPnP Support

Universal Plug and Play (UPnP) allows automatic discovery and configuration of the Gigaset Gateway. UPnP is supported by Windows Me, XP or later, operating systems.

Advanced Gateway Functions

DMZ

One computer on your local network can be configured to allow unrestricted two-way communication with servers or individual users on the Internet. This provides the ability to run programs that are incompatible with firewalls.

Firewall "Snooze"

Temporarily disable firewall protection to limit interference with games and other applications incompatible with firewalls.

Content Filter

Use the Content Filter to block individual user access to undesirable Web sites. Content filtering can be defined differently for each user.

Time of Day Use Restrictions

Limit the time of day during which individual users have access to the Internet. Time limitations can be defined differently for each user.

Advanced Wireless Controls

The Gigaset SE567/SE568 model has a built-in wireless interface. Custom configuration options include wireless access control, 64-bit, 128-bit, or WAP wireless encryption, disable SSID broadcast, and pass phrase key generation for added security.

Minimum System Requirements

At a minimum, your computer must be equipped with the following to successfully install the Gateway. Your Internet Service Provider may have additional requirements for use of their service.

Ethernet connection method

- A network interface card (NIC) that supports 10/100 Ethernet
- Operating system that supports TCP/IP
- Microsoft Internet Explorer or Netscape Navigator versions 5.0 or later

USB connection method

- Available built-in USB port
- Microsoft Internet Explorer or Netscape Navigator versions 5.0 or later

USB Driver-Related Requirements

Additional USB driver-related requirements depend on the operating system and architecture:

Windows operating system

- Pentium-compatible 166 MHz (or faster) processor
- 32 MB RAM
- 10 MB available hard drive space
- Windows 98 or later operating system

Macintosh operating system version 8.6 to 10.2.4

- 100MHz PowerPC or better
- 32 MB RAM
- 10 MB available hard disk space

Macintosh operating system X

- 300MHz PowerPC G3 or better
- 128 MB RAM
- 110 MB available hard disk space (large space requirement due to the Macintosh OS X needing up to 100 MB of additional disk space for system organization after install)

Package Contents

If any of the items are damaged or missing, please contact your Internet Service Provider for assistance.

- Model SE567/SE568 Series Gigaset Residential Gateway
- Power adapter
- CAT-5 Ethernet cable for LAN connections
- RJ11 cable for DSL connection
- USB cable for optional USB installation (on some models)
- Quick Start Guide
- CD-ROM containing USB driver software and user documentation (on some models)

Example Front Panel

Physical Details

Familiarize yourself with the Gateway before installing.

The front panel contains the following LEDs:

Front Panel LEDs

Power	Green	Power is on.	
	Off	Power is off.	

Red	The Power LED briefly shows red
	during power-up. This indicates that the
	Gigaset is conducting the POST
	(Power-On Self Test) that is run each
	tions the Cineset is now and a

time the Gigaset is powered on.

Ethernet	On	One or more Ethernet LAN ports are active.
	Off	No active Ethernet LAN port connection.
Wireless	On	Wireless connection is active.

Off No active wireless connection.

DSL On DSL connection is active.

Off No active DSL connection.

Internet Green Internet connection has been

established.

Activity Off No data being transmitted or received. (if present)

Flashing Data is being transmitted or received.

USB On USB connection is active. (if present)

Off No active USB connection.

Off No active powerline connection.

Rear Panel

DSL PortConnect the RJ11 DSL cable (looks like a telephone (RJ11) cord) here to use your DSL connection through an

existing phone line.

USB Port If your Gateway has a USB port, connect the USB

cable here. The USB driver software must be

installed from the provided CD-ROM.

10/100 Ethernet

Ports 1 - 4

Connect the RJ45 Ethernet cable here to connect your computers, hubs, or switches to the Gateway. If your model has four ports, you can configure port

#4 as either a LAN or WAN port.

Power Adapter

Port

Connect the supplied power adapter provided with

the Gateway here.

Power Button Push this button to power the Gateway on and off.



Example Rear Panel

General Safety Guidelines

When using the Gigaset Gateway, observe the following safety guidelines:

- Never install telephone wiring during a storm.
- Avoid using a telephone during an electrical storm. Lightening increases the risk of electrical shock.
- Do not install telephone jacks in wet locations and never use the product near water.
- Do not exceed the maximum power load ratings for the product; otherwise, you risk dangerous overloading of the power circuit.

Chapter 2

Installation



This chapter covers the physical installation of the Gigaset Gateway.

Minimum System Requirements

- DSL service and an Internet access account from an Internet Service Provider (ISP).
- Network cables for each device you intend to connect to the Gateway.
- TCP/IP network protocol must be installed on all computers.
- For USB connection to the Gateway, the following operating systems are supported:
 - Windows 98, 98SE
 - Windows 2000
 - Windows ME or XP
 - Mac OS versions 8.6 through 10.2.4

Note: Your configuration may vary slightly from the instructions and illustrations in this chapter. Refer to your service provider's documentation, or contact them with questions regarding your specific configuration.

Hardware Installation

You may position the Gigaset Gateway at any convenient location in your office or home. No special wiring or cooling requirements are needed; however, you should comply with the safety guidelines specified in the General Safety Guidelines section.

Basic Installation Procedure

- 1. Install line filters if necessary.
- 2. Connect the cables.
- 3. Install USB drivers if necessary.
- 4. Configure network settings on your computer.
- 5. Configure the Gateway via the Web-based management interface.
- 6. Reboot the computer if prompted. Whenever you are required to reboot the Gateway, allow five seconds between turning off the unit and powering it back on.

Installing Line Filters

Because DSL shares your telephone line, you may need to separate the two signals so they do not interfere with each other. A line filter (may be included with some models) prevents DSL traffic from disrupting the voice signal on the telephone line, and vice versa. Follow the procedures below to install line filters on any device (telephones, fax machines, caller ID boxes) that shares the same telephone line with your DSL. (Note, this section may not apply to you. Consult your provider if you are unsure.)

There are two types of filters to connect between the telephone and the wall plate:

- In-line filter: For use with standard desktop telephones.
- Wall-mount filter. For use with wall-mounted telephones.

DSL performance may be significantly degraded if the line filters are not installed in the correct direction, as illustrated below.

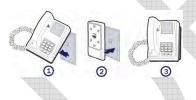




In-Line Filter

For each device sharing the same telephone line:

- 1. Unplug the device's cord from the telephone jack.
- 2. Plug the filter into the telephone jack.
- Plug the telephone cord (or other device cord) into the filter.



Wall-Mount Filter

For a wall-mounted telephone, install a wall mount filter:

- 1. Remove the telephone.
- 2. Connect the wall mount filter to the wall plate.
- 3. Reconnect the telephone.

Connecting Cables

The Gigaset Gateway provides ports for either a USB or an Ethernet connection to your primary computer. Select the interface you will use to connect the Gateway, and follow the step-by-step instructions below for your chosen installation method.

Ethernet Installation Method

To connect the Gigaset Gateway via the Ethernet interface, your computer must have an Ethernet adapter (also called a network interface card, or "NIC") installed.

If your computer does not have this adapter, install it before proceeding further. Refer to your Ethernet adapter documentation for complete installation instructions.





1. Connect the Ethernet cable(s)

- 1) With your computer powered off, connect the Ethernet cable to an Ethernet port (1-4) on the Gateway.
- 2) Connect the other end of the Ethernet cable to the Ethernet port on your computer.
- If desired, use standard 10/100 CAT5 Ethernet cables to connect additional computers to the remaining Ethernet ports on the Gateway.

2. Connect the DSL cable

- 1) Connect the DSL cable (resembles a telephone cord) to the DSL port on the Gateway.
- 2) Plug the other end of the DSL cable into the phone jack.

3. Connect the power

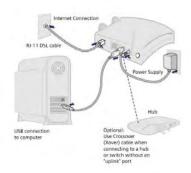
- 1) Connect the power adapter to the rear of the Gateway.
- 2) Plug the power adapter into the electrical wall outlet.
- 3) Flip the power switch to power on the Gigaset Gateway.
- 4) Power on all connected computers.

4. Check the LEDs

- For each active Ethernet connection, the LAN Link LED for the corresponding port number should be lit.
- The DSL and Power LEDs should be lit. (For more information, refer to the <u>LEDs</u> section in Chapter 1.)

When using the Ethernet installation method, you do not have to install any software. Refer to your Internet Service Provider's instructions for installing their software and/or connecting to the Internet. You can now configure the TCP/IP settings as detailed in the next chapter.

USB Installation Method (Microsoft Windows)



1. Connect the USB Cable

- 1) With your computer off, connect the provided USB cable to the USB port on the Gateway.
- Connect the other end of the USB cable to an open USB port on your computer.
- If desired, use standard 10/100 CAT5 Ethernet cables to connect additional computers to the Ethernet ports on the Gateway.

2. Connect the DSL Cable

- 1) Connect the DSL cable (resembles a telephone cord) to the DSL port on the Gateway.
- 2) Plug the other end of the DSL cable into the phone jack.

3. Connect the Power

- 1) Connect the power adapter to the rear of the Gateway.
- 2) Plug the power adapter into the electrical wall outlet.
- 3) Flip the power switch to power on the Gateway.
- 4) Power on all connected computers.

4. Install USB Driver Software

- 1) Insert the USB driver CD-ROM into the CD-ROM drive of your computer.
- When prompted, follow the on-screen instructions to complete the driver installation.

5. Check the LEDs

1) The DSL, USB, and Power LEDs should be lit. (For more information, refer to the <u>LEDs</u> section in Chapter 1.)

You can now configure the TCP/IP settings as detailed in the next chapter.

USB Driver Installation (Macintosh Systems)

When using the USB installation method on a Macintosh, follow these steps to install the USB drivers:

- 1. Insert the Gigaset Installation CD into your CD-Rom drive.
- 2. Open the Gigaset icon from the desktop.
- 3. Click Readme.txt to open it.
- 4. Follow the directions in the Readme.txt file.

You can now configure the TCP/IP settings as detailed in the next chapter.

Chapter 3



Operating System Configuration

This chapter explains how to configure each computer on your network to work with the Gateway.

To access the Internet through the Gigaset Gateway, the TCP/IP protocol must be installed on your computer. If TCP/IP is not already installed on your computer, install it. Refer to your system documentation or online help for instructions.

- Once TCP/IP is installed on your computer, you should <u>check the TCP/IP protocol settings</u> to make sure they are correct for use with the Gateway.
- Once TCP/IP configuration is verified, the next step is to configure your computer to use the Gateway
 for internet access so your PC will use the Gateway when connecting to the Internet and not Dial-Up
 Networking.

The operating system on each computer in your network must have the TCP/IP network settings and Internet access settings configured.

Check TCP/IP Protocol Settings

Because the Gateway uses the TCP/IP network protocol for all functions, it is essential that the TCP/IP protocol be installed and configured properly.

The default network settings for the Gigaset Gateway are:

IP Address: 192.168.254.254 Subnet Mask: 255.255.255.0

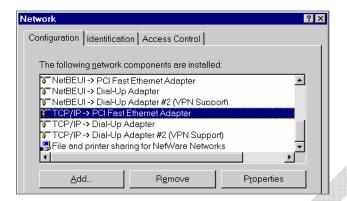
By default, the Gateway will act as a DHCP server, automatically providing a suitable IP address and related information to each computer when the computer boots up. For all non-server versions of Windows, the TCP/IP setting defaults to act as a DHCP client. If using the default Gateway settings and the default Windows TCP/IP settings, you do not need to make any changes.

The instructions to check TCP/IP protocol settings differ between operating system. Check the settings using the instructions for your operating system:

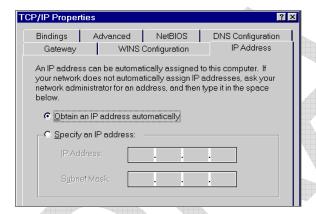
- Windows 9x/ME
- Windows 2000
- Windows XP
- MAC OS 8.6 through 9.x
- MAC OSX

Checking TCP/IP Settings (Windows 9x/ME)

 Select Start>Control Panel >Network. This displays the Configuration tab on the "Network" window.



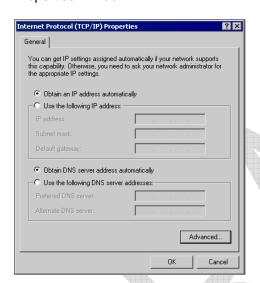
- 2. Select the TCP/IP protocol for your network card.
- 3. Click Properties. This displays the "TCP/IP Properties" window.

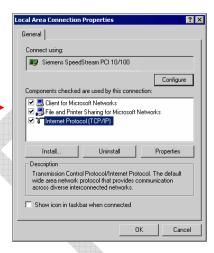


- 4. Click the IP Address tab.
- 5. Ensure that the **Obtain an IP address automatically** option is selected. This is the default Windows settings.
- 6. Close this window.
- 7. Restart your computer to ensure it obtains an IP address from the Gateway.
- 8. Configure internet access using the procedure described in Internet Access Configuration.

Checking TCP/IP Settings (Windows 2000)

- 1. On the Windows taskbar click **Start>Settings>Control Panel**. This displays the "Control Panel" window.
- 2. Double-click **Network and Dial-up Connections**. This displays the "Network and Dial-up Connections" window.
- 3. Right-click **Local Area Connection** and select Properties. This displays the "Local Area Connections Properties" window. ——
- 4. Select the TCP/IP protocol for your network card.
- 5. Click **Properties**. This displays the "Internet Protocol (TCP/IP) Properties" window.

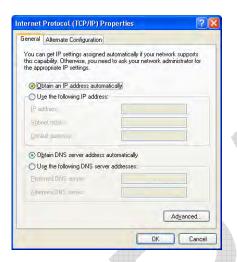


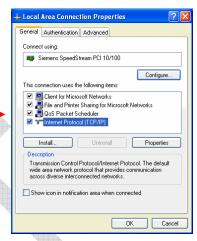


- 6. Select the **Obtain an IP address automatically** and **Obtain DNS server address automatically** options. Exit back to the Control Panel.
- 7. Restart your computer to ensure it obtains an IP address from the Gateway.
- 8. Configure internet access using the procedure described in Internet Access Configuration.

Checking TCP/IP Settings (Windows XP)

- 1. On the Windows taskbar click **Start>Control Panel**. This displays the "Control Panel" window.
- Double-click the **Network Connection** icon. This displays the "Network Connections" window.
- 3. Right-click **Local Area Connection**, then click **Properties**. This displays the "Local Area Connection Properties" window.
- 4. Select the TCP/IP protocol for your network card.
- 5. Click **Properties**. This displays the "Internet Protocol (TCP/IP) Properties" window.

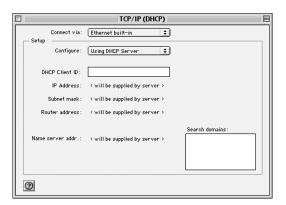




- 6. Ensure that **Obtain an IP address automatically** and **Obtain DNS server address automatically** are selected.
- 7. Exit back to the Control Panel.
- 8. Restart the computer to ensure it obtains an IP address from the Gateway.
- Configure internet access using the procedure described in Internet Access Configuration.

Checking TCP/IP Settings (MAC OS 8.6 through 9.x)

1. Select Apple >Control Panel >TCP/IP. This displays the "TCP/IP" window.



- 2. Select one of the following from the **Connect via** drop-down menu.
 - Ethernet or Ethernet built-in if connecting via Ethernet.
 - Ethernet Adaptor [en0,en1,...] if connecting via USB.
- 3. Select **Using DHCP Server** from the **Configure** drop-down menu.
- 4. Close the "TCP/IP window" and click Save.
- 5. Reboot when configuration is saved. Once rebooted, the computer will pull an IP address from the DHCP server on the Gateway.
- 6. Configure the Gateway using the procedure described in the next chapter.

Checking TCP/IP Settings (MAC OSX)

1. Click Apple -> System Preferences. This displays the "System Preferences" window.



Double-click the **Network** icon under the **Internet & Network** section. This displays the "Network" window.



- 3. Select one of the following from the **Show** drop-down menu:
 - Built-in Ethernet if connecting via Ethernet.
 - Ethernet Adaptor [en0,en1,...] if connecting via USB.
- 4. Select **Using DHCP Server** from the **Configure IPv4** drop-down menu.
- 5. Click Apply Now and quit window.
- 6. Configure the Gateway using the procedure described in the next chapter.

Internet Access Configuration

Windows users must configure their computers to use the Gateway for Internet access. Ensure that the Gateway is installed correctly and the DSL line is functional. Then follow the appropriate procedure below to configure your Web browser to access the Internet via the LAN, rather than by a dial-up connection.

For Windows 9x/2000

- 1. Select Start>Settings>Control Panel to display the Control Panel.
- 2. Double-click the **Internet Options** icon. This displays the "Internet Properties" window.
- 3. Click the Connections tab.
- 4. Click Setup.
- 5. Click I want to set up my Internet connection manually, or I want to connect through a local area network (LAN), then click Next. This displays the "Internet Connection Wizard" window.
- 6. Click I connect through a local area network (LAN), then click Next. This displays the "Local Area Network Internet Configuration" window.
- 7. Ensure all the boxes are deselected, then click **Next**. This displays the "Set Up your Internet Mail Account" window.
- 8. Click No, then click Next. This displays the "Completing the Internet Connection Wizard" window.
- 9. Click **Finish** to close the Internet Connection Wizard. Setup is now complete.
- 10. Configure the Gateway using the procedure described in the next chapter.

For Windows XP

- 1. Select Start>Control Panel.
- 2. Double-click the **Internet Options** icon. This displays the "Internet Options" window.
- 3. Click the Connections tab.
- 4. Click **Setup**. This starts the **New Connection Wizard**.
- 5. Click Next.
- 6. Select Connect to the Internet, then click Next.
- 7. Select Setup my connection manually, then click Next.
- 8. Select Connect using a broadband connection that is always on, then click Next.
- 9. Click Finish.
- 10. Configure the Gateway using the procedure described in the next chapter.

Chapter 4

Gigaset Gateway Setup



This chapter describes how to connect to and setup your Gateway configuration.

This chapter describes the steps to set up the Gigaset Gateway configuration using the Gateway Setup Wizard. Other configuration may also be required on the Gateway, depending on which features and functions of the Gateway you wish to use. Use the table below to locate detailed instructions for the required functions.

To do this	Refer to
Configure users and devices on the Gateway.	Chapter 5, Configuring Users and Devices
Configure Gateway advance options such as ISP connections, networking options, and security.	Chapter 6, Configuring Advanced Features
Monitor the health of the Gateway.	Chapter 7, Monitoring Gateway Health

Before Configuring the Gateway

Before attempting to configure the Gateway, please ensure that:

- Your computer can establish a physical connection to the Gateway. The computer and the Gateway must be directly connected using either the USB or Ethernet ports on the Gateway.
- The Gigaset Gateway is installed correctly and powered on.
- The TCP/IP protocol is installed on all computers on your network. (If you need to install TCP/IP, refer
 to your system documentation or Windows Help.)
- The network settings on each computer are correctly configured.

From this point on, you will perform all configuration of the Gateway from your computer using the Web browser-based setup program.

Connecting to the Gateway

You can connect to the Gateway using <u>UPnP</u> (if it is enabled on your computer) or through the <u>Webbrowser</u>.

Using UPnP (Windows XP and Me)

If your Windows operating system supports UPnP (Universal Plug and Play) and UPnP is enabled, an icon for the Gateway appears in the system tray near the time display, notifying you that a new network device has been found and offering to create a new desktop shortcut to the newly discovered device.

Note: You must be logged in as administrator or be a user with administrative rights for Windows 2000 and XP to be able to install the drivers for the Gateway.

- Unless you intend to change the IP address of the Gateway, you can accept the desktop shortcut.
 Whether you accept the desktop shortcut or not, you can find UPnP devices in My Network Places
 (previously called Network Neighborhood).
- Double-click the icon for the Gateway (either on the desktop or in My Network Places) to access the Gateway's configuration program.
- 3. Refer to the <u>Setup Wizard</u> section for details of the initial configuration process.

Using your Web Browser

The Gigaset Gateway contains an HTTP server that allows you to connect to the Gateway and configure it from your Web browser (Microsoft Internet Explorer or Netscape Navigator, versions 5.0 or later).

To establish a connection from your computer to the Gateway:

- 1. After installing the Gateway, start your computer. If your computer is already running, reboot it.
- 2. Open your Internet Explorer or Netscape Navigator Web browser.
- 3. In the **Address** bar, type http://Gigaset and press the **Enter** key. This displays the "Setup" window.
- 4. Refer to the Setup Wizard section for details of the initial configuration process.

Gateway Setup Wizard

The first time you connect to the Gateway, the Setup Wizard runs automatically. (The Setup Wizard also runs if the Gateway's default settings are restored.) Proceed through the entire Setup Wizard to ensure accuracy of the installation.

You will need to know the username and password for Internet service provided by your ISP. Check the information supplied by your ISP for details.

1. The first window of the Setup Wizard is the "**Welcome**" window. Click **Next** on the "Welcome" window to begin setup. This displays the "Gateway Administrator Setup" window.



- 2. An administrator account has access rights to the Gateway configuration windows. Optionally, change the "admin" user name to a different administrative name by typing the new administrative name in **User Name**. If you wish, simply leave the "admin" user name in **User Name**.
- 3. Type a password in **New Password** and re-type it in **Confirm Password**.
- 4. Click **Next**. This displays the "ISP Password" window.



5. Enter information as specified by your ISP.

6. Click **Next**. This displays the "Configure Time Zone" window.



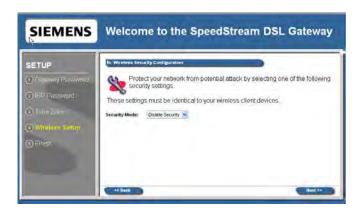
Optionally set the time zone of the area of the world in which you live on the "Configure Time Zone" window. This option must be enabled to define time of day restrictions for users.

- 7. To set the time zone, select the **Yes** option for **Enable Time Client**.
- Select your time zone from the Select Time Zone drop-down menu, then click Next. This displays
 the "Wireless Setup Configuration" window.



Optionally set up wireless clients on your Gateway from the "Wireless Setup Configuration" window.

- 9. To setup wireless clients, select one of the following Wireless Interface options:
 - Select **Enable** to enable a wireless connection for your computer.
 - Select **Disable** if you do not wish to configure the Gateway for wireless, then click **Next**. This
 displays the "Finish" window.
- 10. If you selected **Enable**, enter your wireless network ID in **SSID** (Service Set Identifier). This value is the name of your network and must be identical to that defined for all the wireless client devices connected to your network.
- 11. Optionally select a channel from the **Channel** drop-down menu. The channel is a path of communication to use across your network. The selected channel must be identical to that defined for all the wireless client devices connected to your network. Depending on your area and Gateway configuration, the channel may default to only one value.
- 12. Click **Next**. This displays the "Wireless Security Configuration" window.



Set the wireless security level from the "Wireless Security Configuration" window. **ALL** wireless devices attached to the Gateway **MUST** have the same wireless security settings for your network to have proper communications and security.

13. From the **Security Mode** drop-down menu, select one of the following options:

Disable Security

Disables encryption, providing no wireless security for the Gateway.

WEP 64-bits

Wireless Equivalency Privacy. This option offers 64-bit encryption, which is the least secure WEP option. Please see the section in this document titled <u>Wireless Setup WEP 64-Bit Option</u> for more information.

WEP 128-bits

Wireless Equivalency Privacy. This option offers 128-bit encryption, which is a most secure WEP option. Please see the section in this document titled <u>Wireless Setup WEP 128-Bit Option</u> for more information.

WPA PSK

Wi-Fi Protected Access. WPA security changes encryption keys after a specified amount of time. This is the most secure option for wireless networks. Please see the section in this document titled Wireless Setup WPA PSK Option for more information.

- 14. Once you click Next on the final wireless setup window, the "Finish" window is displayed.
- 15. On the "Finish" window, click **Finish**. This displays the "What do I do now?" window. From this window you may click one of the following:

Surf Now

Your Web browser re-directs you to default home page of the Web browser you are using. You may return to the Gateway's configuration interface at anytime should you choose to further configure the Gateway.

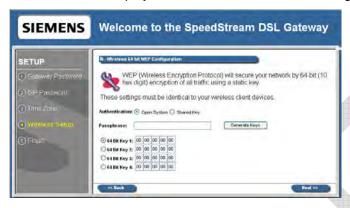
Continue

Displays the "Home" window where you can create usage profiles/rules for different users, change the level or type of security used on the Gateway, or define/configure your network to be managed by the Gateway.

Wireless Setup WEP 64-Bit Option

WEP security offers the same security offered by a wired LAN with encrypted packets. This option offers 64-bit encryption, which is the least secure WEP option. This section assumes you currently have the "Wireless Security Configuration" window displayed on your computer. To use the WEP 64-bit option:

- 1. Select the WEP 64-bits option from the **Security Mode** drop-down menu.
- 2. Click **Next**. This displays the "Wireless 64-bit WEP Configuration" window.



- 3. Select one of the following **Authentication** options:
 - Open System

Open system keys are always authenticated at the device level. After authentication, data is encrypted between the Gateway and the connected device. This is the weakest form of security and should not be used for sensitive data.

- Shared Key
 - Shared keys accepts a string of unencrypted data from a device. The Gateway encrypts with a WEP key and sends back the encrypted data to the attached device.
- Type a phrase in Passphrase. The passphrase is used to generate the 64-bit keys. The passphrase can be between 1 and 32 characters.
- 5. Click **Generate Keys**. The system responds by generating keys that display in the boxes under **Passphrase**. Four different keys are generated.
- 6. Select one of the four keys to use for encryption.
- 7. Click **Next**, and the "Finish" window is displayed.

Wireless Setup WEP 128-Bit Option

WEP security offers the same security offered by a wired LAN with encrypted packets. This option offers 128-bit encryption, which is the most secure WEP option. This section assumes you currently have the "Wireless Security Configuration" window displayed on your computer. To use the WEP 128-bit option:

- 1. Select the WEP 128-bits option from the **Security Mode** drop-down menu.
- 2. Click **Next**. This displays the "Wireless 128-bit WEP Configuration" window.



- 3. Select one of the following **Authentication** options:
 - Open System

Open system keys are always authenticated at the device level. After authentication, data is encrypted between the Gateway and the connected device. This is the weakest form of security and should not be used for sensitive data.

- Shared Key
 - Shared keys accept a string of unencrypted data from a device. The Gateway encrypts with a WEP key and sends back the encrypted data to the attached device.
- 4. Type a phrase in **Passphrase**. The passphrase is used to generate the 124-bit key. The passphrase can be between 1 and 32 characters.
- Click Generate Keys. The system responds by generating keys that display in the boxes under Passphrase.
- 6. Select one of the keys to use for encryption.
- 7. Click **Next**, and the "Finish" window is displayed.

Wireless Setup WPA PSK Option

WPA security changes encryption keys after a specified amount of time. This is the most secure option for wireless networks. This section assumes you currently have the "Wireless Security Configuration" window displayed on your computer. To use the WPA option:

- 1. Select the WPA-PSK option from the **Security Mode** drop-down menu.
- 2. Click **Next**. This displays the "Wireless WPA Configuration" window.



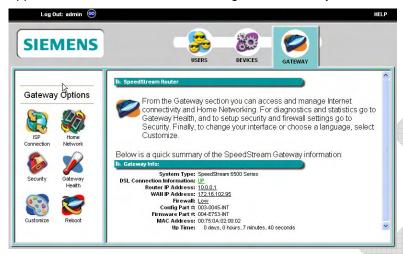
- 3. The "Wireless WPA Configuration" window is used to configure the algorithm, shared key, and key renewal options. Select one of the following options from the **Algorithms** drop-down menu:
 - TKIP

Temporal Key Integrity Protocol is a more powerful security protocol than WEP. This option verifies the security configuration after encryption keys are determined, synchronizes changing of the unicast encryption key for each frame, and determines a unique starting unicast encryption key for each pre-shared key authentication.

- AES
 Advanced Encryption Standard supports a private key algorithm that ranges from 128 to 256 bits.
- 4. Type a key in **Shared Key**. The shared key is used to generate a dynamic encryption key for Gateway security.
- 5. Type a numeric value (in seconds) in **Group Key Renewal** to specify time to lapse between changing the key. The minimum time value is 30.
- 6. Click Next, and the "Finish" window is displayed.

Home Window

After finishing the Setup Wizard and clicking **Configure**, the Home window appears. This window also appears from now on when connecting to the Gateway.



After finishing the Setup Wizard and clicking Configure, the "Home" window is displayed. This window is also displayed from now on when connecting to the Gateway. At the top of this window is the MenuBar that contains the login/logout drop-down menu and Help menu.

Below the Menu Bar is a <u>Toolbar</u> that contains a set of buttons to access various configuration and information windows on the Gateway: Users, Devices, Gateway. In the left navigation pane there are configuration options for the selected Toolbar button. These options differ depending on how a user is logged into the system. An administrator has full configuration rights (shown above), while a user has limited configuration rights. To Home window displays basic networking attributes of the modem including IP address and default gateway specifications.

Pay special attention to **Login** in the top left-hand corner of the window to ensure that you are logged in to access all available features.

Menu Bar

The only two items on the menu bar are the **Log in** drop-down menu and the **Help** menu option. The **Log In** drop-down menu is used to log in a user or administrator. The **Help** option is used to display a help system for the Gateway.