

DDR2200 Series Residential Gateway Installation and Operation Guide DRAFT 4-12-2007

Overview

Introduction

Imagine walking through your home and accessing the Internet from nearly any room. The DDR2200 series residential gateway connects to the DSL network in your home to deliver data, voice, and wired (Ethernet) or wireless gateway capabilities all from one device. You can use your residential gateway to connect to a variety of devices in the home or small office. The residential gateway supports high speed data access, VoIP services, and features that support Internet Protocol TV (IPTV) deployment.

Benefits and Features

Your residential gateway offers the following benefits and features:

- **Full routing functionality.** The gateway router provides the fastest data transfer speeds available between the network and the Internet for multi-user sharing. The high-performance router distributes data seamlessly to all devices in the network without a noticeable effect to performance or speed.
- **True firewall capability.** The gateway firewall includes both standard NAT/PAT security and Stateful Packet inspection to defend against Internet service attacks.
- **High quality data, voice, and IPTV services.** The gateway combines an ADSL2+ bonded modem, 4 port Ethernet switch, HPNA 3.0 bridge and router functionality with optional VOIP and WiFi into one integrated platform.

Overview

- **Compact design.** The gateway is compact enough to sit on a desktop and versatile enough to be wall mounted in an out of the way location. The residential gateway can also stand vertically. When placed on a desktop, the unit will allow a telephone or wireless telephone base station to be placed on top of the gateway to conserve space.
- **Flexible networking.** The gateway combines a variety of home networking technologies in one box: Ethernet, USB, 802.11g wireless, and HPNA.
- **Ethernet.** Ethernet is a network standard for data transmission using either coaxial or twisted pair cable over a LAN (local area network). The information can be transmitted at speeds of 10 to 100 Mbps. If the home or office is wired for Ethernet, use one of the four LAN interfaces on the gateway to create a broadband network.
- **USB.** The USB port allows you to directly connect a computer or other network capable device.
- **802.11g Wireless.** The gateway includes an integrated wireless access point that allows you to roam wirelessly throughout your home or office. With the high-power wireless technology of the DDR2200, wireless "coldspots" are virtually eliminated in the home.
- **HPNA.** The HPNA interface allows you to easily share digital services throughout the home using the existing coaxial cable to distribute content such as video, music, and games. HPNA offers the following benefits:
 - Multi-room DVR. Subscribers can record and share digital services simultaneously in every room.
 - Multi-room gaming. Subscribers can access games from various locations in the home and play simultaneously
 - PC to TV. Subscribers can access data and video services over the HPNA coaxial network throughout the home
- **ADSL2+.** Asymmetric Digital Subscriber Line (ADSL) provides high access transmission speeds for delivery of video, voice, and data services to homes over ordinary copper telephone wire.

Purpose

This document provides the information you need to install and operate the DDR2200 series residential gateway.

Audience

This document is written for subscribers who have purchased a residential gateway and want to experience high-speed Internet and high-quality digital telephone service. Some of the screens in this document reflect more advanced functionality of the residential gateway that subscribers will not be interested in. The installers will use these advanced screens when they initially set up the residential gateway.

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IMPORTANT SAFETY INSTRUCTIONS

IMPORTANT SAFETY INSTRUCTIONS

Notice to Installers

The servicing instructions in this notice are for use by qualified service personnel only. To reduce the risk of electric shock, do not perform any servicing other than that contained in the operating instructions, unless you are qualified to do so.

<p>Note to System Installer For this apparatus, the coaxial cable shield/ screen shall be grounded as close as practical to the point of entry of the cable into the building. For products sold in the US and Canada, this reminder is provided to call the system installer's attention to Article 800-03 and Article 800-100 of the NEC (or Canadian Electrical Code Part 1), which provides guidelines for proper grounding of the coaxial cable shield.</p>	 <p>CAUTION RISK OF ELECTRIC SHOCK DO NOT OPEN</p> <p>AVIS RISQUE DE CHOC ÉLECTRIQUE NE PAS OUVRIER</p>
<p>This symbol is intended to alert you that uninsulated voltage within this product may have sufficient magnitude to cause electric shock. Therefore, it is dangerous to make any kind of contact with any inside part of this product.</p>	<p>CAUTION: To reduce the risk of electric shock, do not remove cover (or back). No user-serviceable parts inside. Refer servicing to qualified service personnel.</p> <p>WARNING TO PREVENT FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS UNIT TO RAIN OR MOISTURE.</p>
	
<p>This symbol is intended to alert you of the presence of important operating and maintenance (servicing) instructions in the literature accompanying this product.</p>	<p>This symbol is intended to alert you of the presence of important operating and maintenance (servicing) instructions in the literature accompanying this product.</p>

2007012 SystemInstaller 800 English

Notice ? l'attention des installateurs de réseaux câblés

Les instructions relatives aux interventions d'entretien, fournies dans la présente notice, s'adressent exclusivement au personnel technique qualifié. Pour réduire les risques de chocs électriques, n'effectuer aucune intervention autre que celles décrites dans le mode d'emploi et les instructions relatives au fonctionnement, ? moins que vous ne soyez qualifi? pour ce faire.

<p>Remarque à l'attention de l'installateur du système Avec cet appareil, le blindage/caran du câble coaxial doit être mis à la terre aussi près que possible du point d'entrée du câble dans le bâtiment. En ce qui concerne les produits vendus aux États-Unis et au Canada, un rappel est fourni pour attirer l'attention de l'installateur sur les articles 800-03 et 800-100 du Code national de l'électricité (ou Code de l'électricité canadien, Partie 1) qui fournissent des lignes directrices concernant la mise à la terre correcte du blindage (caran) du câble coaxial.</p>	 <p>CAUTION RISK OF ELECTRIC SHOCK DO NOT OPEN</p> <p>ATTENTION RISQUE ÉLECTRIQUE NE PAS OUVRIER</p>
<p>Ce symbole a pour but de vous prévenir que des tensions électriques non isolées existent à l'intérieur de ce produit, pouvant être d'une intensité suffisante pour causer des chocs électriques. Il est donc dangereux d'établir un contact quelconque avec l'une des pièces comprises à l'intérieur de ce produit.</p>	<p>ATTENTION: Pour réduire les risques de chocs électriques, ne pas enlever le couvercle (ou le panneau arrière). Ne contient aucune pièce réparable par l'utilisateur. Confier les interventions aux techniciens d'entretien qualifiés.</p> <p>AVERTISSEMENT POUR ÉVITER LES INCENDIES OU LES CHOC ÉLECTRIQUES, NE PAS EXPOSER L'APPAREIL À LA PLUIE OU À L'HYMIDITÉ.</p>
	
<p>Ce symbole a pour but de vous prévenir de la présence d'instructions importantes relatives au fonctionnement ou à l'entretien (et aux réparations) dans la documentation accompagnant ce produit.</p>	<p>Ce symbole a pour but de vous prévenir de la présence d'instructions importantes relatives au fonctionnement ou à l'entretien (et aux réparations) dans la documentation accompagnant ce produit.</p>


2007012 SystemInstaller 800 French

IMPORTANT SAFETY INSTRUCTIONS


Mitteilung f CATV-Techniker

Die in dieser Mitteilung aufgeführten Wartungsanweisungen sind ausschließlich für qualifiziertes Fachpersonal bestimmt. Um die Gefahr eines elektrischen Schlags zu reduzieren, sollten Sie keine Wartungsarbeiten durchführen, die nicht ausdrücklich in der Bedienungsanleitung aufgeführt sind, außer Sie sind zur Durchführung solcher Arbeiten qualifiziert.

Mitteilung an den Systemtechniker
 For dieses Gerät muss der Koaxialkabelschutz/Schirm so nahe wie möglich am Eintrittspunkt des Kabels in das Gebäude geerdet werden. Dieser Erdungsweg istweis liegt den in den USA oder Kanada verkauften Produkten bei. Er soll den Systemtechniker auf Paragraph 800-93 und Paragraph 800-100 der US-Elektrovorschrift NEC (oder für kanadischen Elektrovorschrift Canadian Electrical Code, Teil 1) aufmerksam machen, in denen die Richtlinien für die ordnungsgemäße Erdung des Koaxialkabelschirms festgehalten sind.



Dieses Symbol weist den Benutzer auf das Vorhandensein von nicht isolierten gefährlichen Spannungen im Gerät hin, die Stromschläge verursachen können. Ein Kontakt mit den internen Teilen dieses Produktes ist mit Gefahren verbunden.




CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN

ACHTUNG
STROMSCHLAGGEFAHR
NICHT ÖFFNEN

ACHTUNG: Zur Vermeidung eines Stromschlags darf die Abdeckung (bzw. die Geräterückwand) nicht entfernt werden. Das Gerät enthält keine vom Benutzer wartbaren Teile. Wartungsarbeiten dürfen nur von qualifiziertem Fachpersonal durchgeführt werden.

WARNING
DAS GERÄT NICHT REGEN ODER FEUCHTIGKEIT AUSSETZEN. EIN STROMSCHLAG ODER DURCH EINEN KURZSCHLUSS VERURSACHTER BRAND ZU VERMEIDEN.



Dieses Symbol weist den Benutzer darauf hin, dass die mit diesem Produkt gelieferte Dokumentation wichtige Betriebs- und Wartungsanweisungen für das Gerät enthält.

20070112 Systemkeller 800 German

Aviso a los instaladores de sistemas CATV

Las instrucciones de reparación contenidas en el presente aviso son para uso exclusivo por parte de personal de mantenimiento cualificado. Con el fin de reducir el riesgo de descarga eléctrica, no realice ninguna otra operación de reparación distinta a las contenidas en las instrucciones de funcionamiento, a menos que posea la cualificación necesaria para hacerlo.

Nota para el instalador del sistema
 En lo que se refiere a este aparato, el blindaje del cable coaxial debe conectarse a tierra lo más cerca posible al punto por el cual el cable entra en el edificio. En el caso de los productos vendidos en los EE. UU. y Canadá, el presente aviso se suministra para llamar la atención del instalador del sistema sobre los artículos 800-93 y 800-100 de la NEC (o Código Eléctrico de Canadá, Parte 1), que proporcionan direcciones para una correcta conexión a tierra del blindaje del cable coaxial.



Este símbolo tiene como fin advertirle de que una tensión sin aislamiento en el interior de este producto podría ser de una magnitud suficiente como para provocar una descarga eléctrica. Por consiguiente, resulta peligroso realizar cualquier tipo de contacto con alguna de los componentes internos de este producto.



CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN

ATENCIÓN
RIESGO DE DESCARGA ELÉCTRICA NO ABRIR

ATENCIÓN: con el fin de reducir el riesgo de descarga eléctrica, no retire la tapa (ni la parte posterior). No quite en el interior componentes que puedan ser reparados por el usuario. Encargue su revisión a personal de mantenimiento cualificado.

ADVERTENCIA
PARA EVITAR EL RIESGO DE INCENDIO O DESCARGA ELÉCTRICA, NO EXPONGA LA UNIDAD A LA LLLUVIA O A LA HUMEDAD.



Este símbolo tiene como fin alertarle de la presencia de importantes instrucciones de operación y mantenimiento (revisión) contenidas en la literatura que acompaña al producto.

20070112 Systemkeller 800 Spanish

IMPORTANT SAFETY INSTRUCTIONS

Read These Instructions

Keep These Instructions

Heed All Warnings

Follow All Instructions

Power Source Warning

A label on this product indicates the correct power source for this product. Operate this product only from an electrical outlet with the voltage and frequency indicated on the product label. If you are uncertain of the type of power supply to your home or business, consult your service provider or your local power company.

Ground the Product

WARNING:
 Avoid electric shock and fire hazard! Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding-type plug has two blades and a third grounding prong. The wide blade or the third prong is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.

If this product connects to coaxial cable wiring, be sure the cable system is grounded (earthed). Grounding provides some protection against voltage surges and built-up static charges.

Protect the Product from Lightning

For added protection, unplug this apparatus during lightning storms or when unused for long periods of time. In addition to disconnecting the AC power from the wall outlet, disconnect the signal inputs.

Verify the Power Source from the On/Off Power Light

When the on/off power light is not illuminated, the apparatus may still be connected to the power source. The light goes out when the apparatus is turned off, regardless of whether it is still plugged into an AC power source.

Eliminate AC Mains Overloads

WARNING:
 Avoid electric shock and fire hazard! Do not overload AC mains, outlets, extension cords, or integral convenience receptacles. For products that require battery power or other power sources to operate them, refer to the operating instructions for those products.

IMPORTANT SAFETY INSTRUCTIONS

Prevent Power Cord Damage

Protect the power cord from being walked on or pinched, particularly at plugs, convenience receptacles, and the point where the cord exits from the apparatus.

Provide Ventilation and Select a Location

- Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- Do not place this apparatus on a bed, sofa, rug, or similar surface.
- Do not place this apparatus on an unstable surface.
- Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- Do not install this apparatus in an enclosure, such as a bookcase or rack, unless the installation provides proper ventilation.
- Do not place entertainment devices (such as VCRs or DVDs), lamps, books, vases with liquids, or other objects on top of this product.

Protect from Exposure to Moisture and Foreign Objects

Do not use this apparatus near water.

 **WARNING:**
Avoid electric shock and fire hazard! Do not expose this product to liquids, rain, or moisture.

 **WARNING:**
Avoid electric shock and fire hazard! Unplug this product before cleaning. Clean only with a dry cloth. Do not use a liquid cleaner or an aerosol cleaner. Do not use a magnetic/static cleaning device (dust remover) to clean this product.


 **WARNING:**
Avoid electric shock and fire hazard! Never push objects through the openings in this product. Foreign objects can cause electrical shorts that can result in electric shock or fire.

Accessories Warning

 **WARNING:**
Avoid electric shock and fire hazard! Only use attachments/accessories specified by your service provider or the manufacturer.

IMPORTANT SAFETY INSTRUCTIONS

Service Warnings

 **WARNING:**
Avoid electric shock! Do not open the cover of this product. Opening or removing the cover may expose you to dangerous voltages. If you open the cover, your warranty will be void. This product contains no user-serviceable parts. Refer all servicing to qualified service personnel.


Service is required when the apparatus has been damaged in any way, such as a power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

Check Product Safety

Upon completion of any service or repairs to this product, the service technician must perform safety checks to determine that this product is in proper operating condition.

Protect the Product when Moving It

Always disconnect the power source when moving the apparatus or connecting or disconnecting cables.

 **WARNING:**
Avoid personal injury and damage to this product! Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer or sold with the apparatus. When a cart is used, use caution when moving the cart / apparatus combination to avoid injury from tip-over.

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FCC Compliance

United States FCC Compliance

This device has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against such interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy. If not installed and used in accordance with the instructions, it may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment OFF and ON, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the cable company or an experienced radio/television technician for help.

Any changes or modifications not expressly approved by Scientific-Atlanta, Inc., could void the user's authority to operate the equipment.

The information shown in the FCC Declaration of Conformity paragraph below is a requirement of the FCC and is intended to supply you with information regarding the FCC approval of this device. *The phone numbers listed are for FCC-related questions only and not intended for questions regarding the connection or operation for this device. Please contact your cable service provider for any questions you may have regarding the operation or installation of this device.*

FCC Declaration of Conformity

This device complies with Part 15 of FCC Rules. Operation is subject to the following two conditions: 1) the device may not cause harmful interference, and 2) the device must accept any interference received, including interference that may cause undesired operation.

DDR2200 Residential Gateway Model: DDR2200 Manufactured by: Scientific-Atlanta, Inc. 5030 Sugarloaf Parkway Lawrenceville, Georgia 30044 USA Telephone: 770-236-1077
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Canada EMI Regulation

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

20060628 FCC Standard

IMPORTANT NOTE

FCC Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

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

The availability of some specific channels and/or operational frequency bands are country dependent and are firmware programmed at the factory to match the intended destination. The firmware setting is not accessible by the end user.

Industry Canada Statement:

This device complies with RSS-210 of the Industry Canada Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

IMPORTANT NOTE

Radiation Exposure Statement:

This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

European Union Notice:

Radio products with the CE marking comply with the R&TTE Directive (1999/5/EC), the EMC Directive (89/336/EEC) and the Low Voltage Directive (73/23/EEC) issued by the Commission of the European Community.

Compliance with these directives implies conformity to the following European Norms:

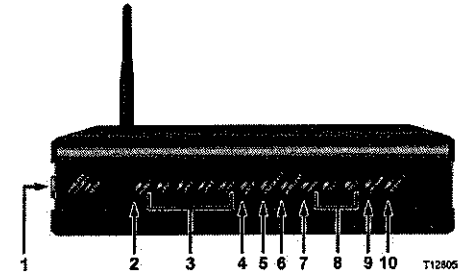
- EN 60950-1 Information Technology Equipment - Safety
- EN 300 328 Technical requirement for radio equipment
- EN 301 489-1/-17 General EMC requirements for radio equipment

Installation Requirements

Before you install your residential gateway, review the package contents that came with your device to ensure that you have all the available items as shown here.

What's On the Front Panel?

The front panel of your residential gateway provides LED status indicators that indicate the operational state of your gateway. Refer to the following diagram for a description of the front panel.



- 1 **wifi-sec** – Allows you to automatically configure the wireless device in the home. The WIRELESS SECURITY SETUP LED shows whether automatic wireless security is on or off
- 2 **POWER** – Illuminates solid green to indicate that AC power is being applied to the residential gateway
- 3 **LAN1 - LAN4** – Illuminates solid green to indicate that an Ethernet carrier is present and blinks to indicate that Ethernet data is being transferred between the PC and the residential gateway
- 4 **USB/PC** – Illuminates solid green to indicate that a USB carrier is present and blinks to indicate that USB data is being transferred between the PC and the residential gateway
- 5 **USB/DEVICE** – Illuminates solid green to indicate that a USB carrier is present and blinks to indicate that USB data is being transferred between the connected USB device and the residential gateway
- 6 **WIRELESS** – Illuminates solid green when the wireless access point is enabled and operational and blinks to indicate that wireless data is being transferred between the PC and the residential gateway. The LED is off when the wireless access point is disabled by the user
- 7 **HPNA** – Indicates HPNA synchronization and activity. Illuminates solid when synchronized and blinks when HPNA activity occurs
- 8 **TEL 1 and TEL 2** – TEL 1 illuminates solid green when telephony service is enabled. Blinks when line 1 is in use TEL2 illuminates solid green when telephony service is enabled. Blinks when line 2 is in use

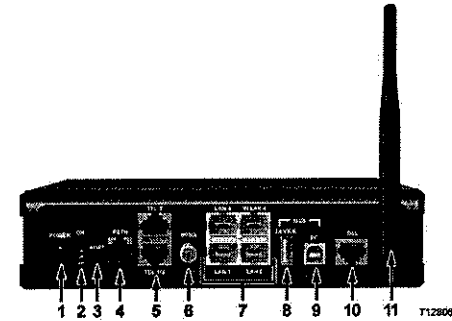
What's On the Front Panel?

- 9 **DSL**—Indicates whether a DSL signal is acquired (or trained). The LED indicators mean the following status:
- Off. Not trained.
 - Blinking. In training.
 - Solid. Trained.
- 10 **INTERNET**—Indicates wide area network (WAN) traffic. The LED indicators mean the following status:
- Solid. IP is connected.
 - Blinking. WAN interface has activity
 - Off. No Internet connection

What's On the Back Panel?

What's On the Back Panel?

Refer to the following diagram for a description of the back panel components.



Important! Do not connect your PC to both the Ethernet and USB ports at the same time. Your modem will not function properly if both the Ethernet and USB ports are connected to your PC at the same time.

- 1 **POWER**—Connects the residential gateway to the AC power plug that is provided with your residential gateway
- 2 **On and Off Switch**—Powers the residential gateway on and off
- 3 **RESET**—Activating this switch resets the residential gateway. Pressing this switch for more than 10 seconds resets the device to factory default values and resets the residential gateway
- 4 **PSTN**—Connects to the home telephone wiring and is used as a backup to voice over IP (VOIP) service in the event of a power outage to the residential gateway
- 5 **TEL 1 and TEL 2**—RJ-11 telephone ports connect to home telephone wiring to conventional telephones or fax machines
- 6 **HPNA**—Connects to the coaxial cable wiring in the house for data and video distribution
- 7 **LAN 1-LAN 3 W/LAN 4**—Four RJ-45 Ethernet ports connect as follows:
 - LAN 1 through 3 connect to the Ethernet port on your PC or your home network
 - W/LAN 4 connects to the Ethernet port on your PC if used as a LAN port or optionally as an Ethernet wide area network (WAN) port that connects to the service provider network
- 8 **USB Device**—12 Mbps USB port connects to the USB port on your device such as a hard drive or digital camera

What's On the Back Panel?

- 9 **USB PC** – 12 Mbps USB port connects to the USB port on your PC
- 10 **DSL** – RJ-11 port connects to the DSL line from the telephone service provider
- 11 **ANTENNA** – Receives and transmits data packets to wireless devices

Connecting the Computer to the Gateway

Connecting the Computer to the Gateway

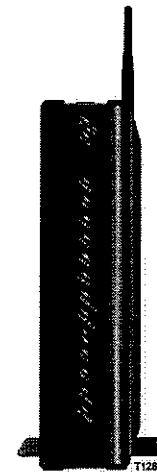
Choose a Connection Type for the Computer

You can connect a computer to the gateway using one of the following methods:

- Ethernet Connection
- Wireless Connection
- USB Connection

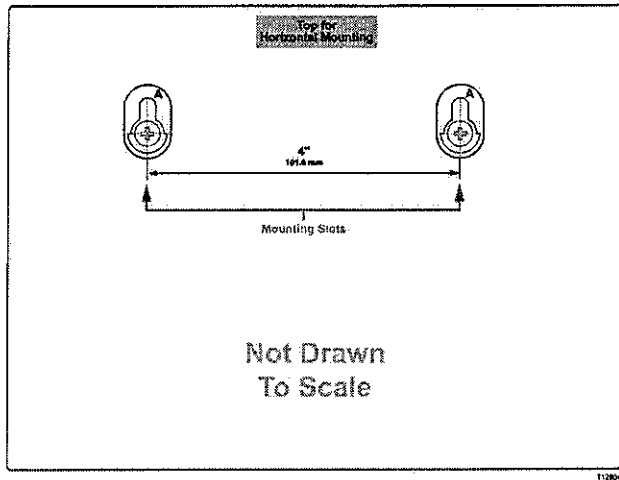
Use Proper Care When Installing the Residential Gateway in a Vertical Position

Some installations may require that you place the residential gateway in a vertical position. Be sure that the housing of the residential gateway is vertical and that the stand is extended as shown in the following illustration:



Mounting the Residential Gateway to the Wall

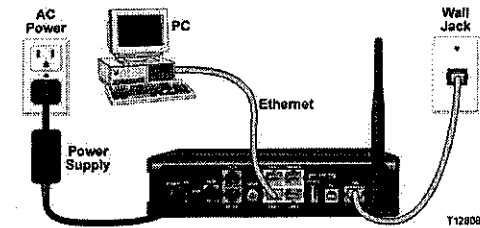
The following illustration shows the location and dimensions of the wall-mounting slots on the bottom of the residential gateway. Use the information on this page as a guide for mounting your residential gateway to the wall.



Connecting the Computer with an Ethernet Connection

Complete these steps to connect the computer with an Ethernet connection.

- 1 Connect the power adapter that came with the residential gateway to the POWER port on the residential gateway and to an electrical outlet.
- 2 Power on the residential gateway. After the residential gateway has completed its startup process, the POWER LED on the front panel of the residential gateway should be green.
- 3 Connect the Ethernet cable provided with the residential gateway from any available Ethernet port (LAN 1 through LAN 4) on the gateway to the Ethernet port on the computer.
- 4 Connect the gray cable provided with the residential gateway from the DSL port on the gateway to a telephone wall jack. See Connect the DSL Interface for more information.

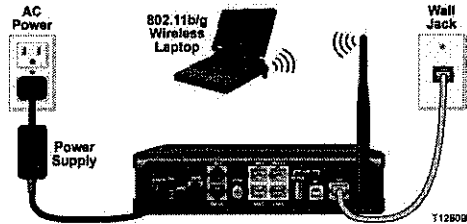


Connecting the Computer with a Wireless Connection

A wireless connection requires a wireless-enabled notebook or a computer with an 802.11b/g wireless network adapter installed. You can purchase a wireless adapter from your service provider.

Complete these steps to connect the computer with a wireless connection.

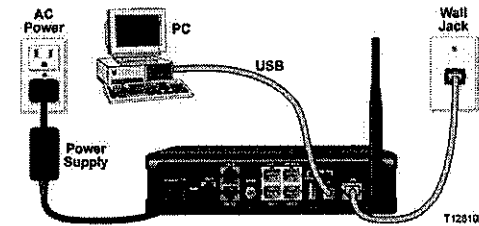
- 1 Connect the power adapter that came with the residential gateway to the POWER port on the residential gateway and to an electrical outlet.
- 2 Power on the residential gateway. After the residential gateway has completed its startup process, the POWER light on the front panel of the residential gateway should be green.
- 3 Connect the gray cable provided with the residential gateway from the DSL port on the residential gateway to a telephone wall jack. See Connect the DSL Interface for more information.
- 4 Install the wireless adapter according to the manufacturer's instructions.



Connecting the Computer with a USB Connection

Complete these steps to connect the computer with a USB connection.

- 1 Connect the power adapter that came with the residential gateway to the POWER port on the residential gateway and to an electrical outlet.
- 2 Power on the residential gateway. After the residential gateway has completed its startup process, the POWER light on the front panel of the residential gateway should be green.
- 3 Connect the USB cable provided with the residential gateway from the USB PC port on the gateway to the USB port on the computer.
- 4 Connect the gray cable provided with the residential gateway from the DSL port on the gateway to a telephone wall jack. See Connect the DSL Interface for more information.



Install the USB Driver for Windows

Complete these steps to install the USB driver for Windows.

- 1 Insert the setup CD in your computer's CD-ROM drive.
- 2 Power on the computer. If the Add Hardware Wizard displays, follow the on-screen instructions. If you are prompted to identify where to search for drivers, deselect Floppy Disk drive and check CD-ROM drive.
- 3 After the driver is installed, click Finish to complete the driver installation.

Note: Microsoft Windows 98 users may be prompted to insert the Windows 98 installation CD-ROM after installing the USB drivers. After the Windows 98 updates are complete, remove the Windows 98 CD and reinsert the Setup Wizard CD into the CD-ROM before rebooting the computer.

Install the USB Driver for Macintosh

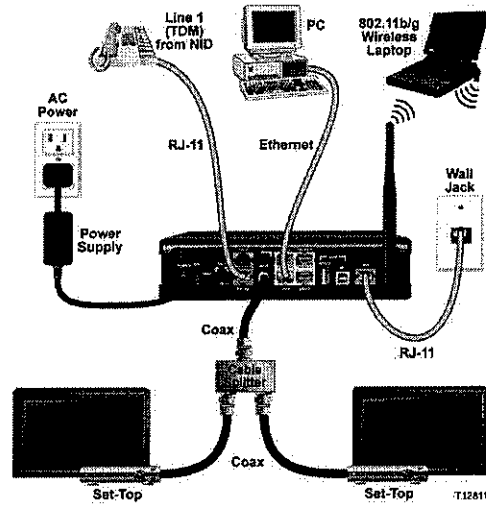
Before you make the USB connection to the gateway, you must install the gateway USB driver on the computer. Complete the following steps to install the USB driver on Macintosh computers running OS 10.2.

Note: The residential gateway supports USB for Macintosh OS 8.6, 9.2, 10.1.4, 10.1.5, 10.2.0, 10.2.1 to 10.2.6, 10.3.3 to 10.3.9, 10.4.0, and 10.41.

- 1 With the computer powered on and the Setup Wizard CD in the CD-ROM drive, double-click the CD icon on the desktop.
- 2 Double-click the USB to begin the driver installation.
- 3 If you have set up an administrator name and password, the Authenticate screen opens.
- 4 Enter the administrator name and password, and click OK.
- 5 Follow the on-screen instructions. When the driver installation is complete, you will be prompted to restart the computer.
- 6 After the computer restarts, connect the blue USB cable that came with the gateway from the USB-PC port on the gateway to the computer's USB port.

Connecting the DSL Interface

Now that you have connected the gateway to power and you have made the LAN connections, you can connect the DSL interface as shown in the following illustration.



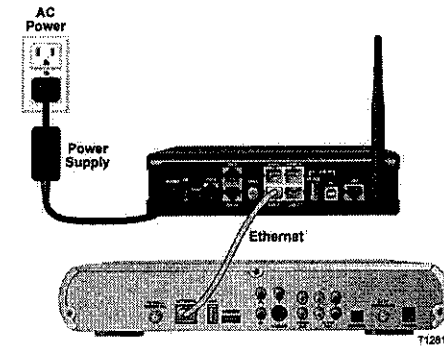
Connecting an IP Set-Top to the Gateway

For IPTV service, you must connect the residential gateway to an IP set-top. You can connect to an IP set-top using an Ethernet or coaxial connection.

Ethernet Connection

Complete the following steps to connect the residential gateway to an IP set-top through Ethernet for IPTV service.

- 1 Ensure that the residential gateway is powered on.
- 2 Connect an Ethernet cable from the Ethernet port (LAN 1 through LAN 4) on the gateway to the Network port on the set-top.
- 3 Power on the IP set-top.

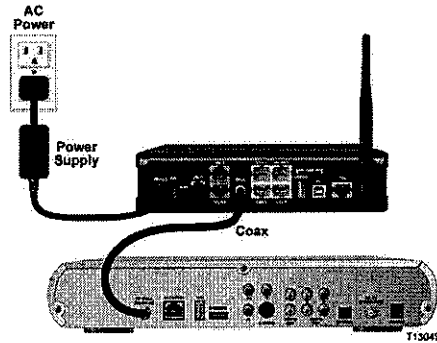


Connecting an IP Set-Top to the Gateway

Coaxial Connection

Complete the following steps to connect the residential gateway to an IP set-top with coaxial cable for IPTV service.

- 1 Ensure that the residential gateway is powered on.
- 2 Connect a coaxial cable from the HPNA port on the gateway to the TO WALL (Video In) port on the set-top.
- 3 Power on the IP set-top.



Configuring the DDR2200 Residential Gateway

Configuring the DDR2200 Residential Gateway

The user interface (UI) for the DDR2200 residential gateway contains web pages that show the current status of the residential gateway. The UI also enables advanced users to configure the residential gateway parameters such as DHCP (Dynamic Host Configuration Protocol), wireless network settings, port forwarding, and parental control, and so forth. This section provides information that you can use to configure and interact with the residential gateway through the user interface.

System Summary

The System Summary screen provides a summary of the software used by the residential gateway and indicates the current status of the DSL connection. You can use this screen to find hardware and software information and physical and IP layer information.

Path: System>Summary

The screenshot shows the 'System Summary' page with the following data:

Device Info	
Model Name:	DDR 2200
Serial Number:	0000-00000
Manufacturer:	Scientific Atlanta
Software Version:	3.0
Hardware Version:	1.0
MAC Address:	00:1B:0C:70:77:0E
The information reflects the current status of your DSL connection	
LAN IP Address:	192.168.1.1
Default Gateway:	192.168.1.1
Primary DNS Server:	192.168.1.1
Secondary DNS Server:	192.168.1.1
Line Rate - Upstream:	
Line Rate - Downstream:	
System Up/Down:	4 days 14 minutes 0 seconds

WAN Information

The WAN Info screen provides information about the ADSL2+ wide area network (WAN) parameters and status. You can use this screen to check the ADSL2+ connection.

Path: System>Details>WAN

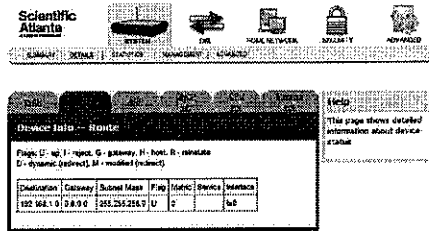
The screenshot shows the 'WAN Info' page with the following table:

VPI/VCI	Line ID	Capacity	Service	Interface	Protocol	Line	QoS	Error	Status	IP Address
0/35	1	1.0M	over_0_M	nas_D_3A	MER	Enable	Disable	Enable	Link Down	

Route Information

The Device Info – Route screen shows the routing table for the residential gateway. This screen provides the gateway address for specific destination IP addresses.

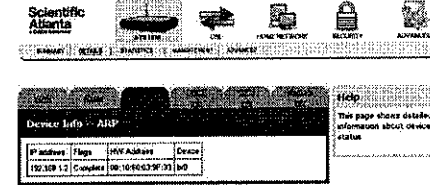
Path: System>Details>Route



ARP Information

The ARP Information screen displays the address resolution protocol (ARP) table. This table shows the IP address to MAC address translation.

Path: System>Details>ARP



DHCP Leases

The Device Info – DHCP Leases screen displays the Dynamic Host Configuration Protocol (DHCP) table. This screen shows a mapping of services (shown by their MAC addresses) and their assigned IP addresses. The DHCP server for the residential gateway assigns these IP addresses to the devices. The screen also shows when the lease for the IP address expires.

Path: System>Details>LAN DHCP

Hostname	MAC Address	IP Address	Expires In
ATLSHAWAGNERCA	00:10:60:03:9F:33	192.168.1.2	23 hours, 59 minutes, 6 seconds

CPU Information

The CPU Info screen shows detailed information about the active processes running on the residential gateway.

Path: System>Details>CPU Info

PID	USER	STATUS	RSS	PPID	%CPU	%MEM	COMMAND
10344	admin	running	368	10343	3.0	1.2	exe
2	admin	SW	0	1	0.9	0.0	kssoftpd/0
592	admin	sleep	2144	591	0.0	7.3	vodsl
574	admin	sleep	2144	1	0.0	7.3	vodsl
611	admin	sleep	2144	591	0.0	7.3	vodsl
608	admin	sleep	2144	591	0.0	7.3	vodsl
614	admin	sleep	2144	591	0.0	7.3	vodsl
613	admin	sleep	2144	591	0.0	7.3	vodsl
612	admin	sleep	2144	591	0.0	7.3	vodsl
606	admin	sleep	2144	591	0.0	7.3	vodsl
597	admin	sleep	2144	591	0.0	7.3	vodsl
607	admin	sleep	2144	591	0.0	7.3	vodsl
615	admin	sleep	2144	591	0.0	7.3	vodsl
609	admin	sleep	2144	591	0.0	7.3	vodsl
598	admin	sleep	2144	591	0.0	7.3	vodsl
591	admin	sleep	2144	574	0.0	7.3	vodsl
610	admin	sleep	2144	591	0.0	7.3	vodsl
542	admin	sleep	2028	78	0.0	6.9	htpfd
541	admin	sleep	1748	78	0.0	5.9	cfm
78	admin	sleep	1644	43	0.0	5.6	cfm

Memory Information

The Memory Info screen shows the detailed memory availability of the residential gateway.

Path: System>Details>Memory Info

Memory Info

MemTotal:	29328 kB
MemFree:	760 kB
Buffers:	1684 kB
Cached:	16224 kB
SwapCached:	0 kB
Active:	5640 kB
Inactive:	14152 kB
HighTotal:	0 kB
HighFree:	0 kB
LowTotal:	29328 kB
LowFree:	760 kB
SwapTotal:	0 kB
SwapFree:	0 kB
Dirty:	0 kB
Writeback:	0 kB
Mapped:	5296 kB
Slab:	4832 kB
Committed_AS:	4424 kB
PageTables:	276 kB
VmallocTotal:	1048560 kB
VmallocUsed:	3312 kB
VmallocChunk:	1044168 kB

Help
This page shows detailed information about device status

LAN Statistics

The Statistics – LAN screen displays statistics for the local area network (LAN). This screen shows the number of transmitted and received packets on the LAN interface for Ethernet, USB, and wireless devices.

Path: System>Statistics>LAN

Statistics - LAN

Interface	Received			Transmitted		
	Bytes	Pkts	Drops	Bytes	Pkts	Errors
Ethernet LAN(4)	142254	10688	0	696134	8885	0
Ethernet wlan	2134708	13317	0	246224	11044	0
USB	0	0	0	0	0	0

Help
This page shows summary of statistics information

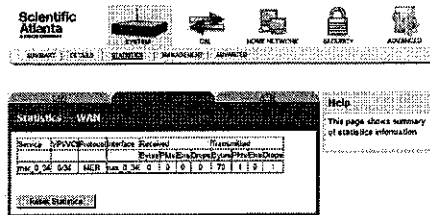
Reset Statistics

To reset the statistics, click **Reset Statistics** on the screen. This action clears the counters and sets them to zero for the packets received and transmitted on the LAN interface.

WAN Statistics

The Statistics – WAN screen displays statistics for the devices and interfaces on the wide area network (WAN). This screen shows the number of transmitted and received packets for the DSL WAN interface.

Path: System>Statistics>WAN



Reset Statistics

To reset the statistics, click **Reset Statistics** on the screen. This action clears the counters and sets them to zero for the packets received and transmitted on the WAN interface.

ATM Interface Statistics

The ATM Statistics screen displays statistics on the ATM interface. This screen shows the ATM Layer-2 statistics such as the number of ATM cells transmitted and received over the ATM interface.

Path: System>Statistics>ATM



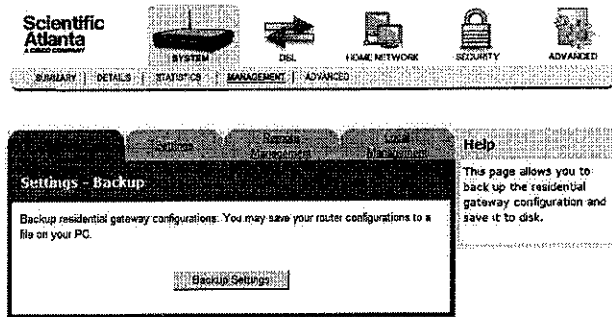
Reset Statistics

To reset the statistics, click **Reset** on the screen. This action clears the counters and sets them to zero for the packets received and transmitted on the ATM interface.

Settings Backup

The Settings Backup screen allows you to back up the residential gateway configuration and save it to disk.

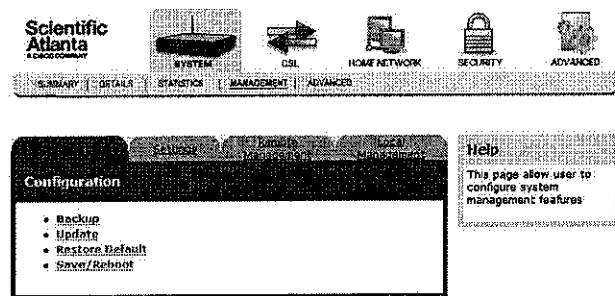
Path: System>Management>Configuration>Backup



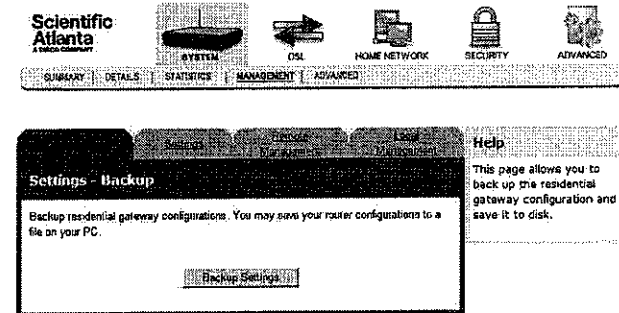
Back Up Configuration

To back up the configuration for the residential gateway, complete the following steps.

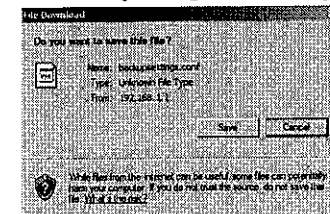
- 1 Click **System** on the main screen.
- 2 Click **Management**. The Configuration screen opens with the Configuration tab in the forefront.



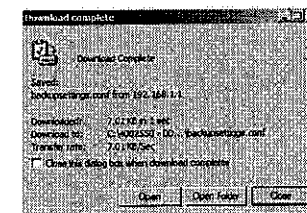
- 3 Click **Backup**. The Settings Backup screen opens.



- 4 Click **Backup Settings**. The following screen is displayed.



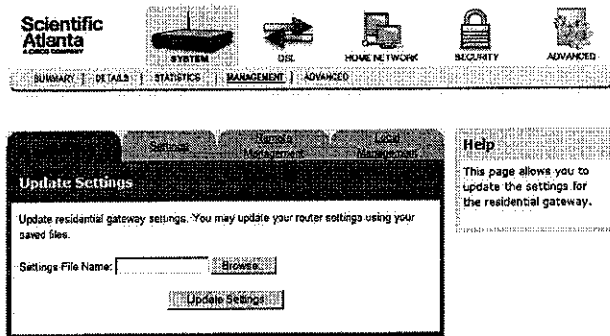
- 5 Click **Save**. The system prompts you to select a location to store the backup.
- 6 Select a location and type in a file name.
- 7 Click **Save** to save a backup of the configuration. The system displays a message when the download of the file is complete.



Update Settings

The Update Settings screen allows you to update the settings for the residential gateway

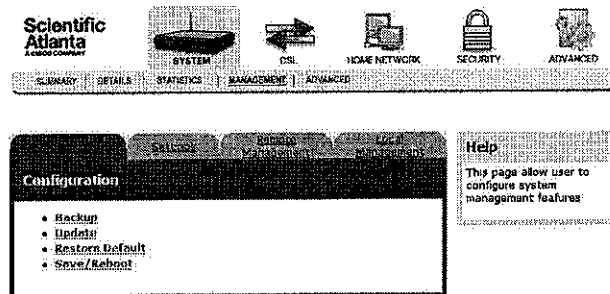
Path: System>Management>Configuration>Update



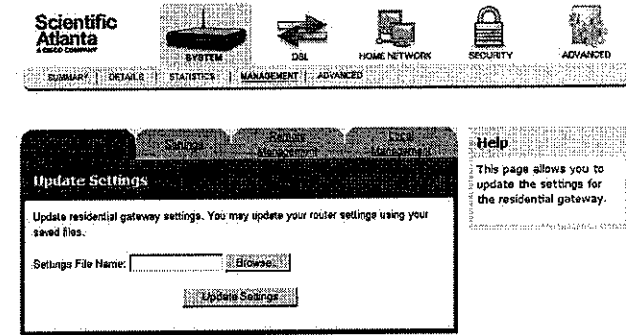
Updating Configuration Settings

To update the configuration settings for the DDR2200, complete the following steps.

- 1 Click **System** on the main screen.
- 2 Click **Management**. The Configuration screen opens with the Configuration tab in the forefront.



- 3 Click **Update**. The Tools Update Settings screen opens.

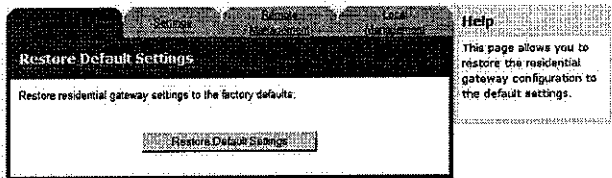


- 4 In the Settings File Name field, enter the name of the configuration file that you want to use to update your settings. You can click **Browse** to locate the file.
- 5 Click **Update Settings** to update the configuration of the residential gateway.
- 6 Wait a few minutes while the system reboots the residential gateway. The new configuration takes effect after the residential gateway reboots.

Restore Default Settings

The Restore Default Settings screen allows you to restore the residential gateway configuration to the default settings.

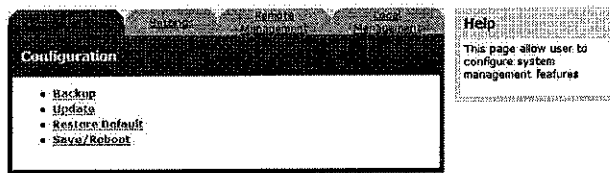
Path: System>Management>Configuration>Restore Default



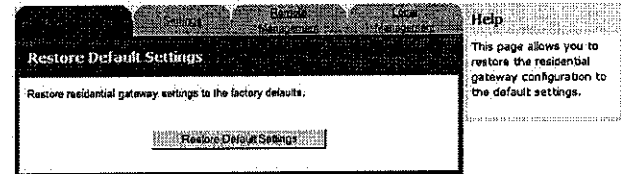
Restoring the Configuration to the Default Settings

To restore the configuration to the default settings, complete the following steps.

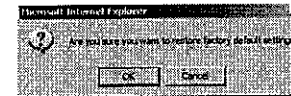
- 1 Click **System** on the main screen.
- 2 Click **Management**. The Configuration screen opens with the Configuration tab in the forefront.



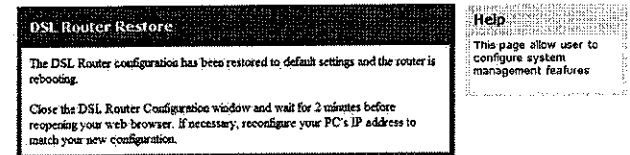
- 3 Click **Restore Default**. The Tools Restore Default Settings screen opens.



- 4 Click **Restore Default Settings**. The system displays the following prompt:



- 5 Click **OK**, The system displays the following message:

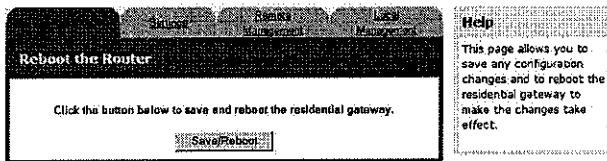


- 6 Follow the instructions on the the screen to restore the default settings.

Saving the Configuration for the Residential Gateway

The Reboot the Router screen allows you to save any configuration changes and to reboot the router to make the changes take effect.

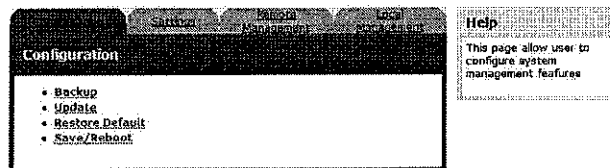
Path: System>Management>Configuration>Restore Default>Save/Reboot



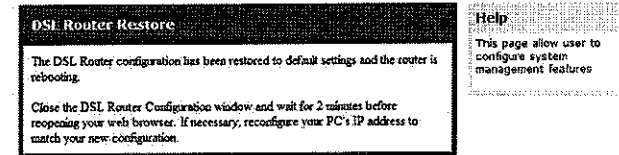
Saving the Configuration and Rebooting the Residential Gateway

To save any configuration changes and to reboot the router to make the changes take effect, complete the following steps.

- 1 Click **System** on the main screen.
- 2 Click **Management**. The Configuration screen opens with the Configuration tab in the forefront.



- 3 Click **Save/Reboot**. The system displays the following message:

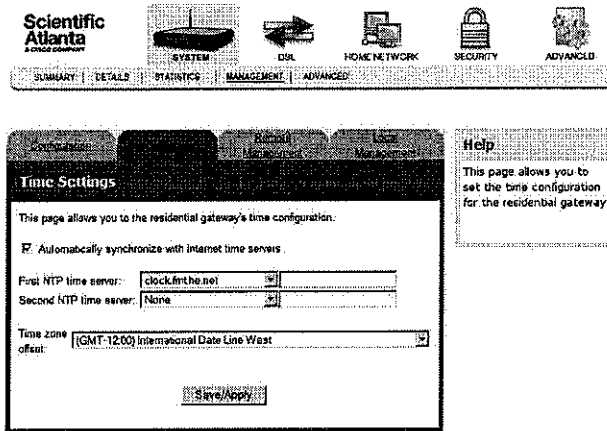


- 4 Follow the instructions on the the screen to save the configuration and to reboot the router. The System Summary screen opens when the DDR2200 has finished rebooting. The new settings are displayed.

Time Settings

The Time Settings screen allows you to synchronize the time for the residential gateway with the Internet time.

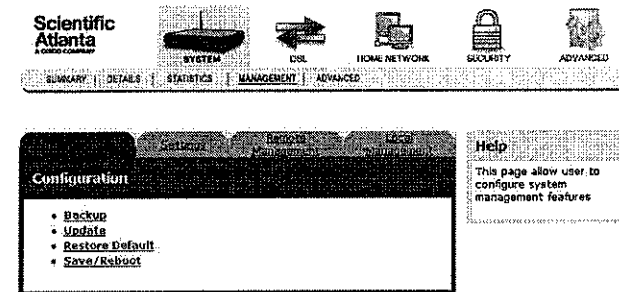
Path: System>Management>Settings>Internet time



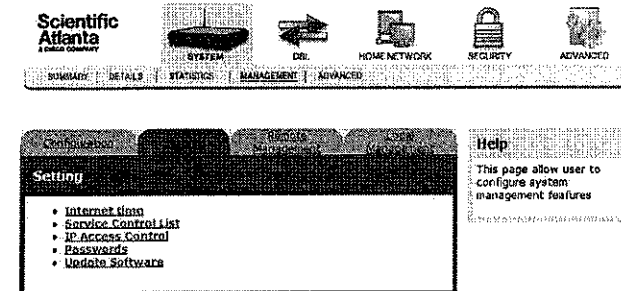
Synchronize with Internet Time

To synchronize the time for the residential gateway with the Internet time, complete the following steps.

- 1 Click **System** on the main screen.
- 2 Click **Management**. The Configuration screen opens with the Configuration tab in the forefront.

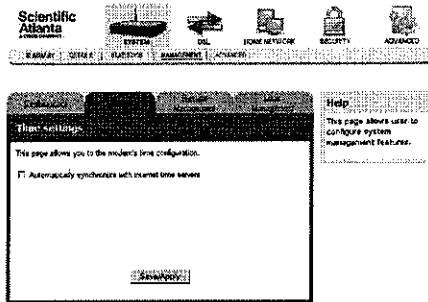


- 3 Click the **Settings** tab. The Setting screen opens.

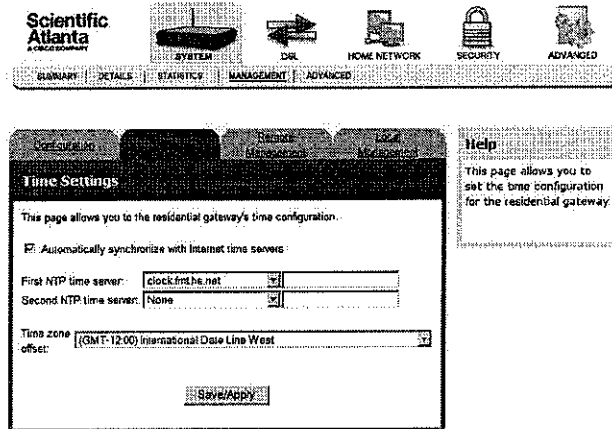


Configuring the DDR2200 Residential Gateway

- Click **Internet time**. The Time settings screen opens.



- Check the box **Automatically synchronize with Internet time servers**. The Time settings screen opens with populated fields.



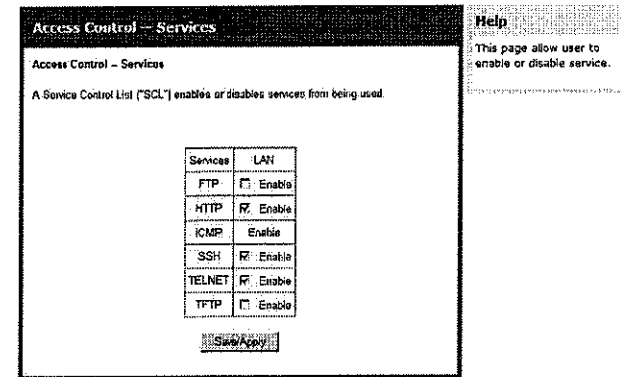
- In the **First NTP time server** field, select a time server from the pull-down list. If you select **Other**, enter the name of the server in the blank field.
- In the **Second NTP time server** field, select a time server from the pull-down list. If you select **Other**, enter the name of the server in the blank field.
- In the **Time zone offset** field, select the time zone specific to your area.
- Click **Save/Apply**.

Configuring the DDR2200 Residential Gateway

Access Control Services

The Access Control Services screen allows you to enable or disable services such as FTP, HTTP, ICMP on the residential gateway.

Path: System>Management>Settings>Service Control List

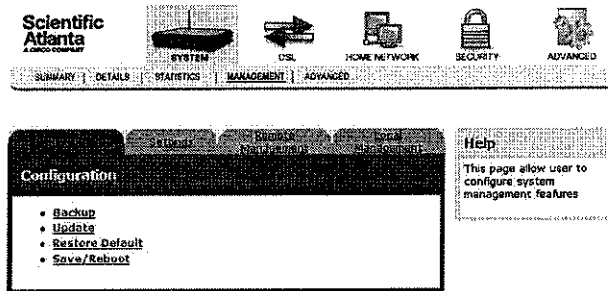


Configuring the DDR2200 Residential Gateway

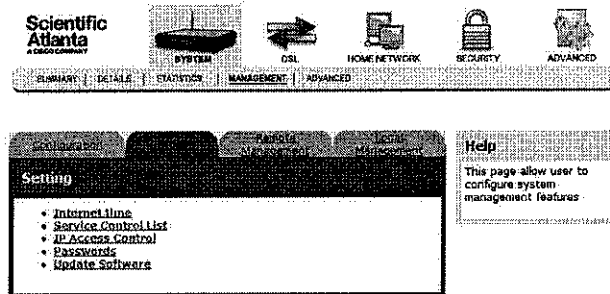
Enabling or Disabling Services

To enable or disable services on the residential gateway, complete the following steps.

- 1 Click **System** on the main screen.
- 2 Click **Management**. The Configuration screen opens with the Configuration tab in the forefront.

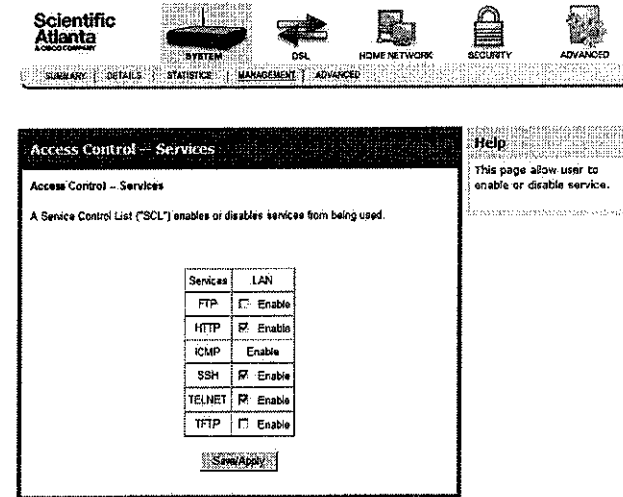


- 3 Click the **Settings** tab. The Setting screen opens.



Configuring the DDR2200 Residential Gateway

- 4 Click **Service Control List**. The Access Control Services screen opens.



- 5 To enable or disable a service, do the following:
 - To enable a service, select the check box next to the service you want to enable. A check box with a check indicates that the service is enabled.
 - To disable a service, select the check box next to the service you want to disable. A check box without a check indicates that the service is disabled.
- 6 Click **Save/Apply** to enable or disable the selected services.

IP Access Control

The IP Address Access Control mode, if enabled, permits access to local management services from IP addresses contained in the Access Control List. If the Access Control mode is disabled, the system will not validate IP addresses for incoming packets. The services are the system applications listed in the Service Control List

Path: System>Management>Settings>IP Access Control



Access Control - IP Address

Access Control - IP Address

The IP Address Access Control mode, if enabled, permits access to local management services from IP addresses contained in the Access Control List. If the Access Control mode is disabled, the system will not validate IP addresses for incoming packets. The services are the system applications listed in the Service Control List.

Access Control Mode: Disable Enable

Help

This page allow user to configure IP Address features

Adding IP Address Access Control

To add IP address access control, complete the following steps.

- 1 Click System on the main screen. The System Summary screen opens by default.



System Summary

Device Info:	
Serial Number:	0000-0000
Manufacturer:	Scientific Atlanta
Software Version:	1.0
Hardware Version:	1.0
MAC Address:	0018:6E:0075:0d

The information reflects the current state of your DSL connection.

LAN IP Address:	192.168.1.1
Default Gateway:	
Primary DNS Server:	192.168.1.1
Secondary DNS Server:	192.168.1.1
Line Rate - Upstream:	
Line Rate - Downstream:	
System Uptime:	4 Days 04 weeks 9 seconds

Help

This page shows summary of device information and current status

- 2 Click the Management tab. The Configuration screen opens.



Configuration

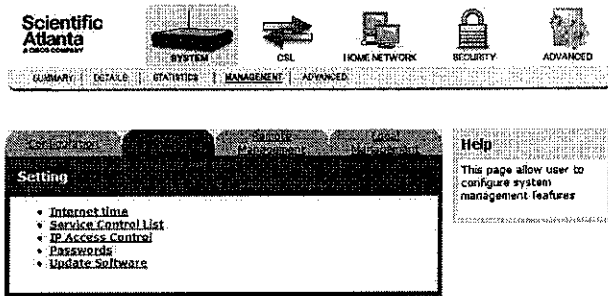
- Backup
- Update
- Restore Default
- Save/Reboot

Help

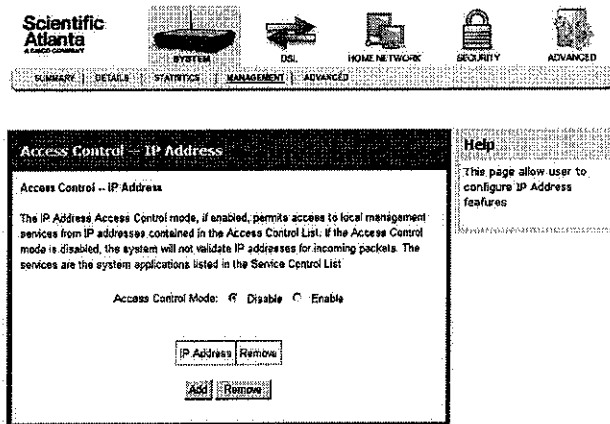
This page allow user to configure system management features

Configuring the DDR2200 Residential Gateway

- 3 Click the Settings tab. The Setting screen opens.

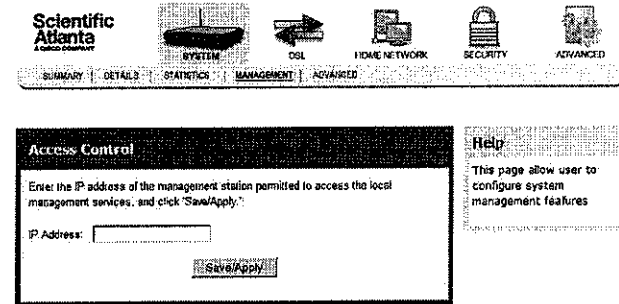


- 4 Click IP Access Control. The Access Control IP Address screen opens.



Configuring the DDR2200 Residential Gateway

- 5 Click Add. The Access Control screen opens.



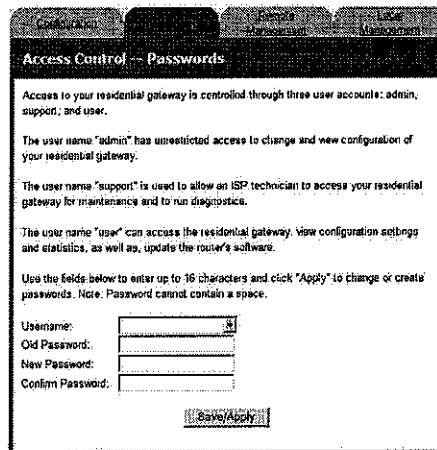
- 6 In the IP Address field, enter the IP address of the management station that you want to allow access to the local management services.
7 Click Save/Apply to allow access for the IP address you entered.

Password Access to the Residential Gateway

Access to the residential gateway is controlled through three user accounts:

- **admin.** Allows unrestricted access to change and view the configuration of the residential gateway.
- **support.** Allows an ISP technician to access your residential gateway for maintenance and to run diagnostics
- **user.** Allows access to view configuration settings and statistics, as well as, to update the residential gateway's software.

Path: System>Management>Settings>Passwords

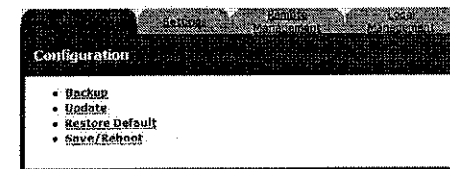


Help
This page allows user to configure system management features.

Creating Passwords

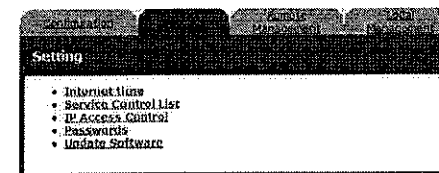
To create passwords for the residential gateway, complete the following steps.

- 1 Click **System** on the main screen.
- 2 Click **Management**. The Configuration screen opens with the Configuration tab in the forefront.



Help
This page allow user to configure system management features

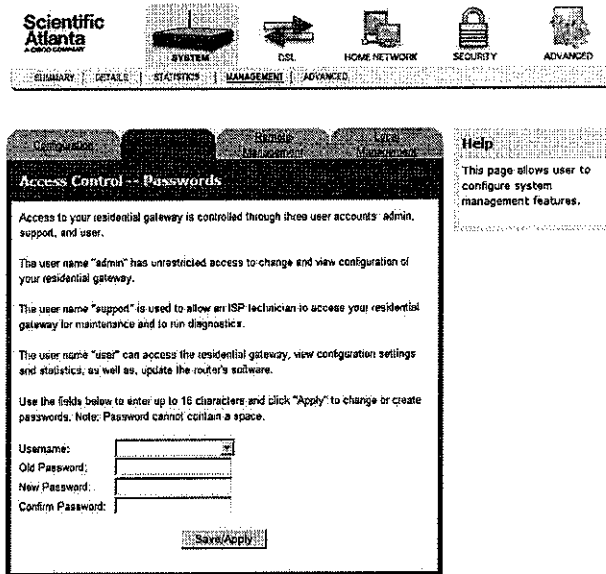
- 3 Click the **Settings** tab. The Setting screen opens.



Help
This page allow user to configure system management features

Configuring the DDR2200 Residential Gateway

- Click **Passwords**. The Access Control Passwords screen opens.



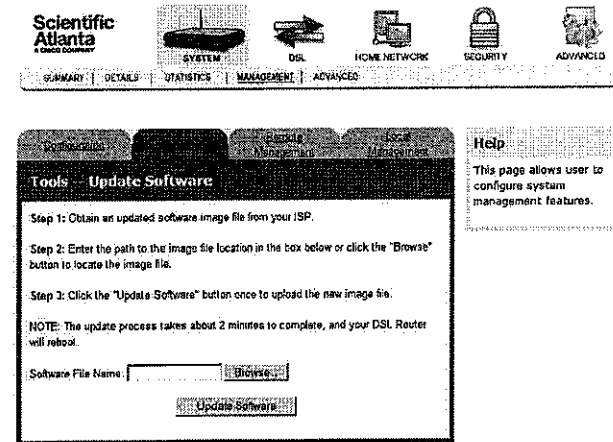
- In the User Name field from the drop-down list, select the type of password you are creating: admin, support, or user.
- In the Old Password field, enter the old password. The maximum character length is 16 characters, and passwords cannot contain a space.
- In the New Password field, enter the new password. The maximum character length is 16 characters, and passwords cannot contain a space.
- In the Confirm Password field, enter the new password again to confirm your entry.
- Click **Save/Apply** to save the password.

Configuring the DDR2200 Residential Gateway

Software Update for the Residential Gateway

The Update Software screen allows you to update the software for the residential gateway with a new version.

Path: System>Management>Settings>Update Software

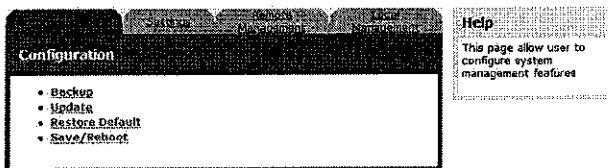


Configuring the DDR2200 Residential Gateway

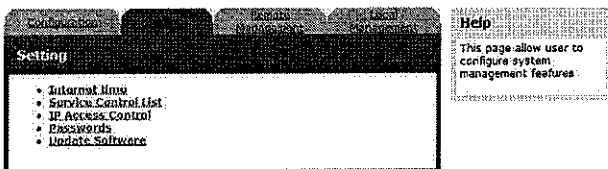
Updating the Software for the Residential Gateway

To update the software for the residential gateway, complete the following steps.

- 1 Click **System** on the main screen.
- 2 Click **Management**. The Configuration screen opens with the Configuration tab in the forefront.

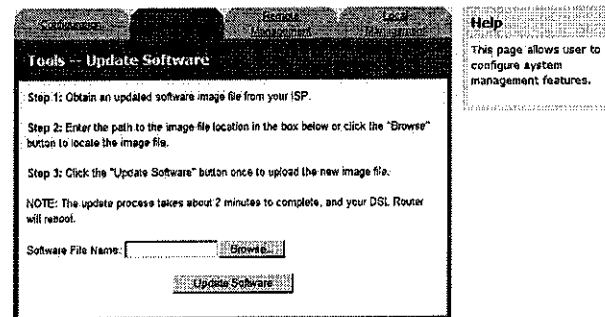


- 3 Click the **Settings** tab. The Setting screen opens.



Configuring the DDR2200 Residential Gateway

- 4 Click **Update Software**. The Update Software screen opens.

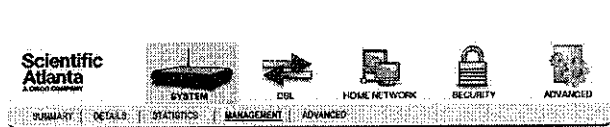


- 5 In the **Software File Name** field, enter the name of the updated software image that you obtained from your ISP. You can click **Browse** to locate the file.
- 6 Click **Update Software** to update the software of your residential gateway with the new version. The residential gateway loads the new software and reboots when the software upload is complete.

Remote Management TR-069 Client

The WAN Management Protocol Technical Report-069 (TR-069) allows an auto-configuration server (ACS) to perform auto-configuration, provisioning, collection of statistics, and diagnostics for this residential gateway.

Path: System>Management>Remote Management



Remote Management -- TR-069 Client

WAN Management Protocol (TR-069) allows a Auto Configuration Server (ACS) to perform auto-configuration, provisioning, collection, and diagnostics for this device.

Select the desired values and click "Apply" to configure the TR-069 client options.

Inform: Disable Enable

Inform Interval:

ACS URL:

ACS User Name:

ACS Password:

Connection Request User Name:

Connection Request Password:

Help
This page allows user to configure system management features

Configuring the TR-069 Client Options

For the client embedded in the residential gateway to communicate with the TR-069 server, you must configure the client so that it is recognized by the server.

- 1 Click **System** on the main screen.
- 2 Click **Management**. The Configuration screen opens with the Configuration tab in the forefront.



Configuration

- Backup
- Update
- Restore Default
- Save/Reboot

Help
This page allow user to configure system management features

- 3 Click the Remote Management tab. The Remote Management TR-069 screen opens.



Remote Management -- TR-069 Client

WAN Management Protocol (TR-069) allows a Auto Configuration Server (ACS) to perform auto-configuration, provisioning, collection, and diagnostics for this device.

Select the desired values and click "Apply" to configure the TR-069 client options.

Inform: Disable Enable

Inform Interval:

ACS URL:

ACS User Name:

ACS Password:

Connection Request User Name:

Connection Request Password:

Help
This page allows user to configure system management features

Configuring the DDR2200 Residential Gateway

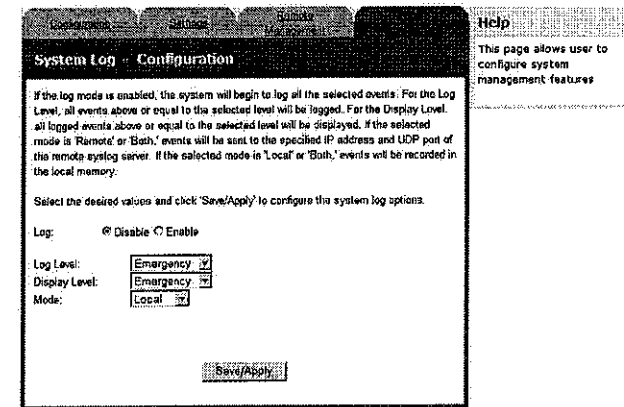
- 4 In the Inform field, do one of the following:
 - Click **Enable** to tp enable the periodic "inform" messages from the residential gateway.
 - Click **Disable** to disable the inform messages to the residential gateway.
- 5 In the **Inform Interval** field, enter frequency that the inform messages are sent from the residential gateway to the autoconfiguration server.
- 6 In the **ACS URL** field, enter the URL for the autoconfiguration server.
- 7 In the **ACS User Name** field, enter the user name for autoconfiguration server.
- 8 In the **ACS Password** field, enter the password for the autoconfiguration server.
- 9 In the **Connection Request User Name** field, enter the name of the connection request.
- 10 In the **Connection Request Password** field, enter the password for the connection request.
- 11 Click **GetRPCMethods** to obtain the list of remote procedural calls (RPC) supported by the autoconfiguration server.
- 12 Click **Save/Apply** to save the configuration changes.

Configuring the DDR2200 Residential Gateway

System Log Configuration

The System Log Configuration screen allows you to log all the selected events on the residential gateway. For example, a selected event is a failed login.

Path: System>Management>Local Management>System Log Configuration

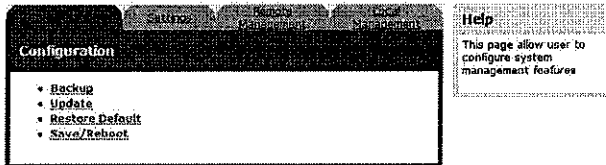


Configuring the DDR2200 Residential Gateway

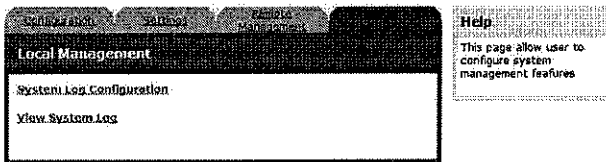
Logging Events

To log selected events, complete the following steps.

- 1 Click **System** on the main screen.
- 2 Click **Management**. The Configuration screen opens with the Configuration tab in the forefront.

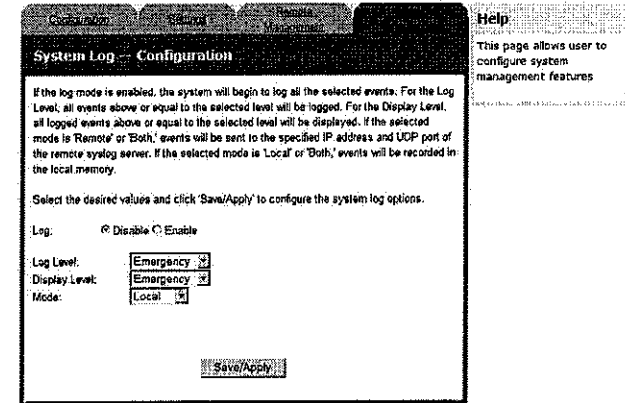


- 3 Click the **Local Management** tab. The Local Management screen opens.



Configuring the DDR2200 Residential Gateway

- 4 Click **System Log Configuration**. The System Log Configuration screen opens.



- 5 Do you want to enable the logging of events?
 - If **yes**, in the Log field select **Enable**.
 - If **no**, in the Log field, select **Disable** and click **Save/Apply** to turn off logging. You have completed this procedure.
- 6 In the Log Level field, select the level of events that you want to log from the following options. All events above or equal to the selected level will be logged.
 - Emergency
 - Alert
 - Critical
 - Error
 - Warning
 - Notice
 - Informational
 - Debugging

Configuring the DDR2200 Residential Gateway

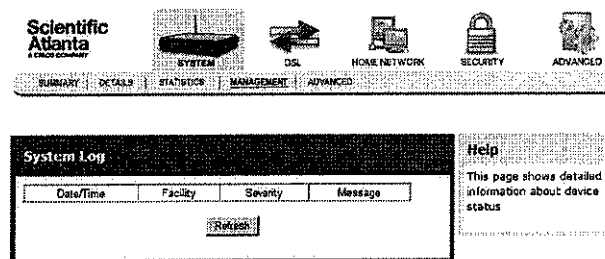
- 7 In the Display Level field, select the level of the logged events that you want to display from the following options. All logged events above or equal to the selected level will be displayed.
 - Emergency
 - Alert
 - Critical
 - Error
 - Warning
 - Notice
 - Informational
 - Debugging
- 8 Select the mode for the logging from the following options. If the selected mode is "remote" or "both," events will be sent to the specified IP address and UDP port of the remote syslog server. If the selected mode is "local" or "both," events will be recorded in the local memory.
 - Local
 - Remote
 - Both
- 9 Click **Save/Apply** to start logging events.

Configuring the DDR2200 Residential Gateway

Viewing System Logs

The System Log screen allows you to view the logs of activity for the residential gateway.

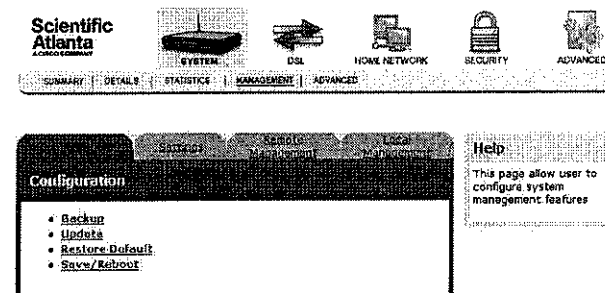
Path: System>Management>Local Management>View System Log



Viewing System Logs

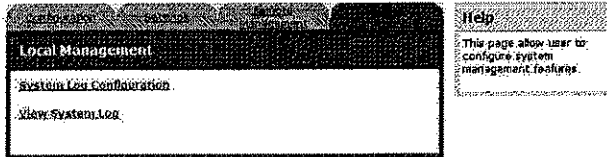
To view the system log for the residential gateway, complete the following steps.

- 1 Click **System** on the main screen.
- 2 Click **Management**. The Configuration screen opens with the Configuration tab in the forefront.

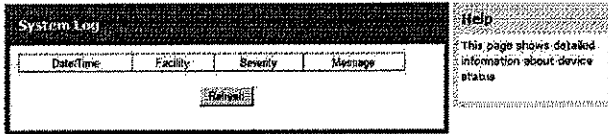


Configuring the DDR2200 Residential Gateway

- 3 Click the **Local Management** tab. The Local Management screen opens.



- 4 Click **View System Log**. The System Log screen opens.



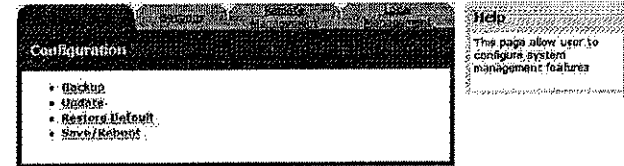
- 5 Review the log entries on the screen.
- 6 Click **Refresh** to refresh the system log.

Configuring the DDR2200 Residential Gateway

Disabling Logging

To disable the logging function, complete the following steps.

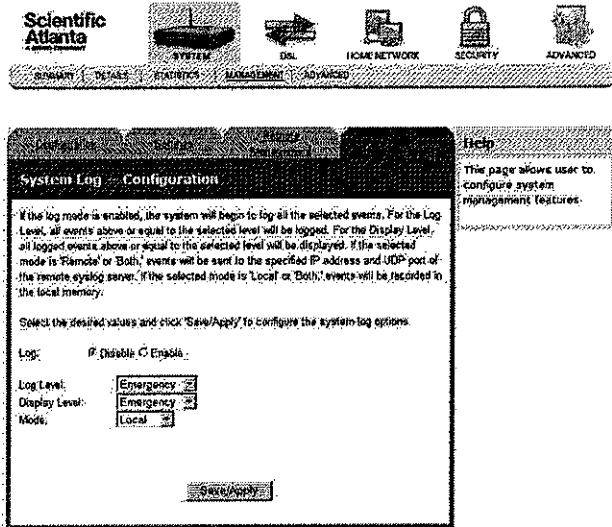
- 1 Click **System** on the main screen.
- 2 Click **Management**. The Configuration screen opens with the Configuration tab in the forefront.



- 3 Click the **Local Management** tab. The Local Management screen opens.



- Click **System Log Configuration**. The System Log Configuration screen opens.



- In the Log field, select **Disable**.
- Click **Save/Apply**. The following prompt appears alerting you that you will lose any information captured by the residential gateway:

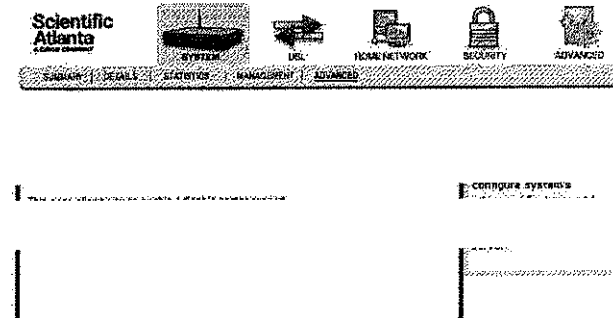


- Are you sure you want to disable logging and lose the captured data?
 - If yes, click **OK** to turn off logging.
 - If no, click **Cancel**.

Printer Server Settings

The Printer Server Settings screen allows you to enable or disable printer support.

Path: System>Advanced



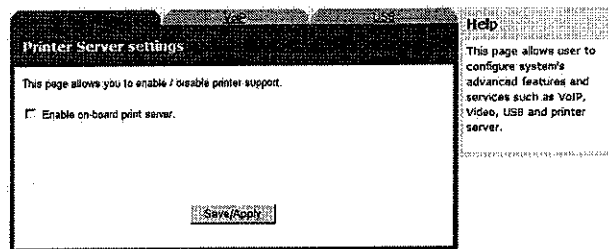
Configuring the DDR2200 Residential Gateway

Enabling the Print Server

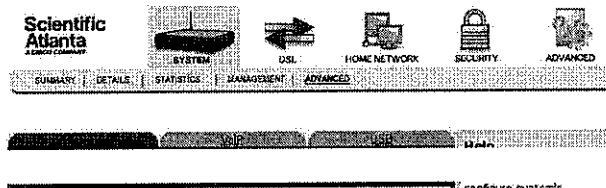
To enable the print server, complete the following steps.

- 1 Click **System** on the main screen.

Click the **Advanced** tab. The Printer Server settings screen opens with the Printer Server tab in the forefront.



- 2 Select the **Enable on-board print server** check box. The screen populates with more fields.



- 3 In the Printer name field, enter the name of the print server you want to enable.
- 4 In the Make and model field, enter the make and model of the printer.
- 5 Click **Save/Apply** to enable the print server.

Configuring the DDR2200 Residential Gateway

Disabling the Print Server

To disable the print server, complete the following steps.

- 1 Click **System** on the main screen.

- 2 Click the **Advanced** tab. The Printer Server settings screen opens with the Printer Server tab in the forefront.



- 3 De-select the **Enable on-board print server** check box. The screen refreshes and the fields for entering printer name, make, and mode are removed from the screen.
- 4 Click **Save/Apply** to disable the print server.

DSL Summary

The DSL Summary screen shows the DSL settings, such as signal to noise ratio and output power and line coding.

Path: DSL>Summary

	Downstream	Upstream
SNR Margin (dB):		
Attenuation (dB):		
Output Power (dBm):		

DSL Statistics

The DSL Statistics screen displays statistics for devices and interfaces on the ADSL network. This screen shows the details of the physical layer of the DSL line such as the connection rate and signal to noise ratio.

Path: DSL>Statistics



Statistics		
	Downstream	Upstream
SNR Margin (dB):		
Attenuation (dB):		
Output Power (dBm):		

Help
This page shows DSL line statistics.

Testing the Quality of the DSL Connection

The ADSL Bit Error Rate (BER) test determines the quality of the ADSL connection. The test is done by transferring idle cells containing a known pattern and comparing the received data with this known pattern to check for any errors.

To test for quality of the DSL connection, complete the following steps.

- 1 From the Statistics screen under DSL, click **ADSL BER Test**. The ADSL BER Test Start screen opens.

- 2 In the **Tested Time (sec)** field, enter the duration of the test in seconds. Values are: 1, 5, 10, 20, 60, 120, 180, or 240 seconds.
- 3 Click **Start** on the ADSL BER Test - Start screen to start the test.

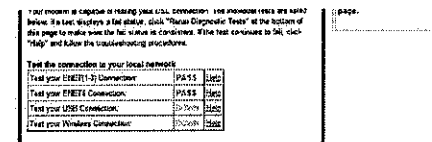
Reset Statistics

To reset the statistics, click **Reset Statistics** on the screen. This action clears the ADSL cell counters and sets them to zero.

DSL Diagnostics

The Diagnostics screen shows the results of diagnostics tests that the residential gateway performs. The residential gateway is capable of testing your DSL connection. The individual tests are listed on the Diagnostics screen.

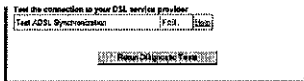
Path: DSL>Diagnostics



Running Diagnostic Tests

To run diagnostic tests for the residential gateway, complete the following steps.

- 1 Click **DSL** on the main screen.
- 2 Click the **Diagnostics** tab. The Diagnostics screen opens.



- 3 If a test displays a fail status, click **Rerun Diagnostic Tests** to make sure the fail status is consistent. If the test continues to fail, click **Help** and follow the troubleshooting procedures.

DSL Settings

The DSL Settings screen allows you to set the modulation for the residential gateway, select a phone line pair, and to select advanced capability of the chip set: seamless rate adaptation (SRA) and bitswap enable.

Path: DSL>Setting