In This Chapter

Logging In to the Residential Gateway

The default configuration of the residential gateway uses IP address 192.168.1.254. If you have connected the residential gateway correctly and you have properly configured your computer, use the following steps to log in to the residential gateway as an administrator.

Note: A non-administrative user may need a different user name and password for logging in to the residential gateway. These users can access non-privileged information.

1 On your PC, open the web browser that you prefer to use.

2 In the address field, enter the following IP address: 192.168.1.254. The system prompts you to enter your user name and password.

3 Enter **admin** for the user name and **1PTV-ADM1N** (where 1 is the numeral one in both 1PTV and ADM1N) for the password. The residential gateway opens with the System Summary page in the forefront. You can use this web interface to check the status of the residential gateway and to configure parameters.

Note: The screens shown in this guide represent the default values for the device.

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 as well as physical and IP layer information.

This screen also provides a link to the Setup Wizard. The Setup Wizard is a step-by-step sequence to set up your residential gateway for the first time to ensure proper operation.

The Log Out button on this screen allows you to quickly log out and log back in without opening a browser.

Path: System > Summary

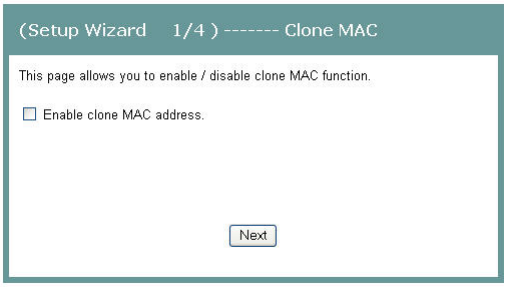
Setting Up Your System with the Setup Wizard

The Setup Wizard is a step-by-step sequence to set up your residential gateway for the first time to ensure proper operation. The wizard combines the various tasks into one convenient tool to reduce configuration time. The wizard requires that you make a few selections within this process. Your selections will depend on your service provider.

To set up your system with the Setup Wizard, complete the following steps.

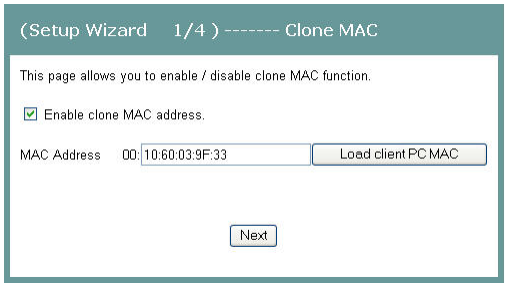
1 Click **System** on the main screen. The System Summary window opens.

2 Click **Setup Wizard** at the top of the screen. The (Setup Wizard 1/4) ------ Clone MAC screen opens.



3 Do you want to enable the clone MAC function? MAC cloning enables you to change the MAC address of the residential gateway to match the MAC address of your PC or any service provider supplied MAC address. If you do not enable MAC cloning, the default MAC address of the residential gateway is used.

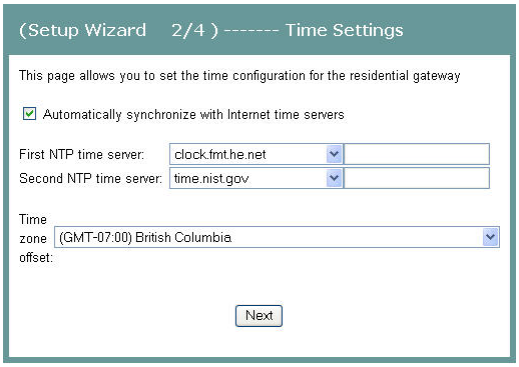
- If **yes**, select the Enable clone MAC address check box. A field appears for you to enter the MAC address you want to clone. Go to step 4.



- If **no**, clear the Enable clone MAC address check box. Go to step 5.

4 In the MAC address field, type in a MAC address or click **Load client PCMAC** to load your PC's MAC address.

5 Click **Next**. The (Setup Wizard 2/4 ------- Time Settings) screen opens. This screen lets you synchronize the time on the residential gateway with an Internet time server. If you do not synchronize the time with an Internet time server, the residential gateway will use its default time.



6 Do you want to automatically synchronize the time on the residential gateway with an Internet Time server?

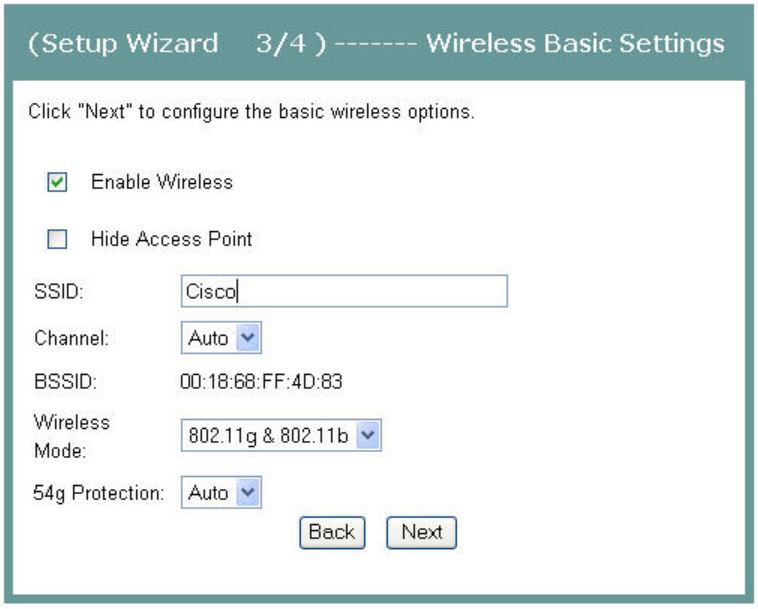
- If **yes**, check the Automatically synchronize with Internet time servers check box. Go to step 7.
- If **no**, clear the Automatically synchronize with Internet time servers check box. The residential gateway will get its time from its own internal clock. Go to step 9.

7 In the First NTP time server field, select the Network Time Protocol (NTP) time server from the drop-down list that you want the residential gateway to check first to get its time.

8 In the Second NTP time server field, select the time server from the drop-down list that you want to use as a backup server for the residential gateway to get its time.

9 In the Time zone offset field, select your time zone from the drop-down list.

10 Click **Next**. The (Setup Wizard 3/4) ------- Wireless Basic Settings screen opens. The residential gateway offers wireless capability by default. This screen allows you to configure the wireless settings to work with the devices in your environment.



11 Do you want to enable wireless?

- If **yes**, check the Enable Wireless check box.
- If **no**, clear the Enable Wireless check box. The wireless capability of the residential gateway is disabled, and all devices communicating with the residential gateway will have to be hard wired.

12 Do you want to prevent other wireless devices from communicating over the wireless network with the residential gateway?

- If **yes**, select the Hide Access Point check box.
- If **no**, clear the Hide Access Point check box. No devices will be locked out from communicating with the residential gateway over the wireless network.

13 In the SSID field, enter the service set identifier (SSID).

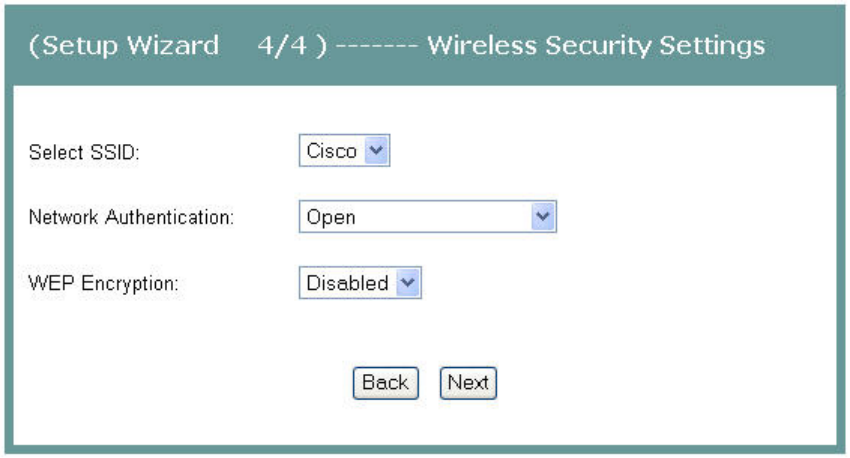
14 In the Channel field, select the channel from the drop-down list to select the frequency that you will use for wireless communication. Values are auto and channels 1 through 11.

15 In the Wireless Mode field, select one of the following modes:

- 802.11g & 802.11b
- 802.11g only
- 802.11b only

16 In the 54g Protection field, select Auto to enable 54g protection or Off to disable the function. The Auto option will use RTS/CTS to improve 802.11g performance in mixed 802.11g/802.11b networks. Turning the protection off maximizes 802.11g throughput under most conditions.

17 Click **Next.** The (Setup Wizard 4/4) ----- Wireless Security Settings screen opens.



18 In the Select SSID field, select the SSID from the drop-down list that you want to use.

19 In the Network Authentication field, choose one of these two options for the authentication method:

- Open. All devices may access the wireless network when WEP Encryption is disabled. When no authentication is required and if encryption is disabled, then the data that is passing between the access point and the client is also not encrypted. When WEP is enabled, the data is encrypted, but the client is not authenticated.
- WPA/WPA2. See ***Securing Your Wireless Network with Encryption Keys*** (on page 120).

20 Do you want to enable WEP Encryption?

- If **yes**, in the WEP Encryption field, select **Enabled** from the drop-down list.
- If **no**, in the WEP Encryption field, select **Disabled** from the drop-down list.

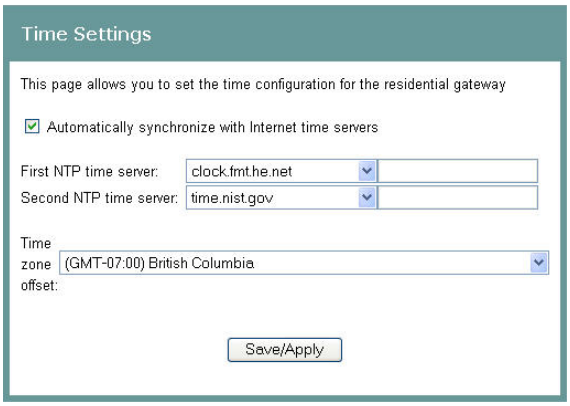
21 Click **Save/Reboot** to save the changes you made. You must reboot the gateway for the changes to take effect.

Setting System Date and Time

When you first set up your system with the wizard, you set your system's date and time. At a later time, you may need to reset the date and time, and you can use the following procedure.

To set the system date and time, complete the following steps.

1. Click **System** on the main screen. The System Summary window opens.
2. Under the Admin section on the screen, click **NTP Server Setting**. The Time Settings screen opens.



3. Make sure the Automatically synchronize with Internet time servers check box is checked.
4. In the First NTP time server field, select **clock.fmt.he.net** from the drop-down list.
5. In the Second NTP time server field, select **time.nist.gov** from the drop-down list.
6. In the Time zone offset field, select the time zone that you want to use from the drop-down list.
7. Click **Save/Apply** to save your settings.

Setting Password

To set the password for the residential gateway, complete the following steps.

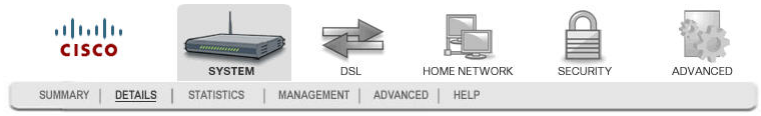
1. Click **System** on the main screen. The System Summary window opens.
2. Under the Admin section on the screen, click **Password Setting**. The Access Control -- Password screen opens.

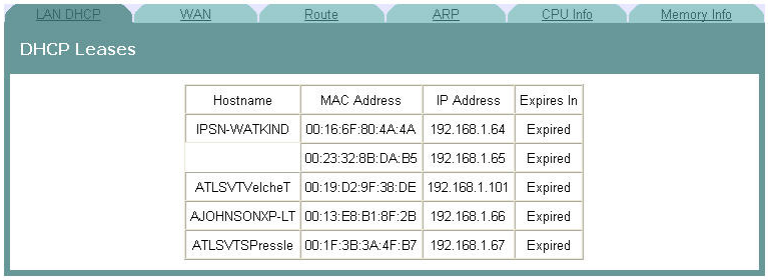
3. In the Username field, select one of the following options for the user name:
   - admin. Allows unrestricted access to change and view the configuration of the residential gateway. This login allows access to privileged information. The default password for this user name is 1PTV-ADM1N (where 1 is the numeral one in both 1PTV and ADM1N).
   - support. Allows an ISP technician to access your residential gateway for maintenance and to run diagnostics. The default password for this user name is 1PTV-SUPP0RT (where 1 is the numeral in 1PTV and 0 is the numeral 0 in SUPP0RT).
   - user. Allows access to view configuration settings and statistics, as well as, to update the residential gateway's software. The default password is user.
4. In the **Old Password** field, enter the old password you have been using.
5. In the **New Password** field, enter the new password.
6. In the **Confirm Password** field, enter the new password again to confirm it.
7. Click **Save/Apply** to save your user name and password.

DHCP Leases

The DHCP Leases screen displays the Dynamic Host Configuration Protocol (DHCP) table. This screen shows a mapping of hosts (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



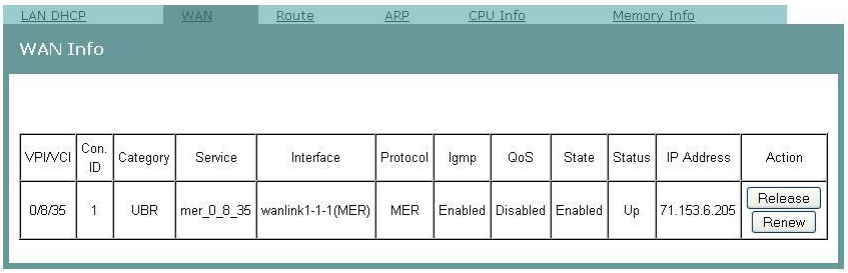


Hostname	MAC Address	IP Address	Expires In
IPSN-WATKIND	00:16:6F:80:4A:4A	192.168.1.64	Expired
	00:23:32:8B:DA:B5	192.168.1.65	Expired
ATLSVTVelcheT	00:19:D2:9F:38:DE	192.168.1.101	Expired
AJOHNSONXP-LT	00:13:E8:B1:8F:2B	192.168.1.66	Expired
ATLSVTSPressle	00:1F:3B:3A:4F:B7	192.168.1.67	Expired

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

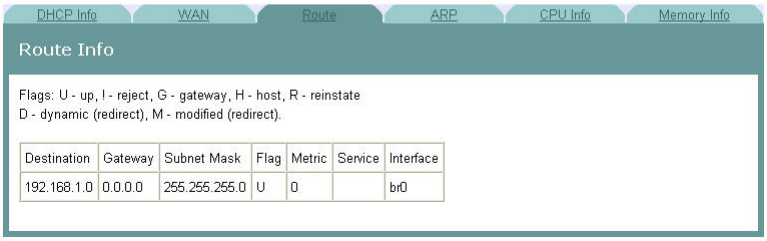


In MER protocol (as shown here), press **Release** or **Renew** to release your current WAN IP address and obtain a new DHCP lease. In PPPoE or PPPoA protocol (not shown here), press **Connect** to activate a new WAN connection or press Disconnect to disable the connection.

Route Information

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

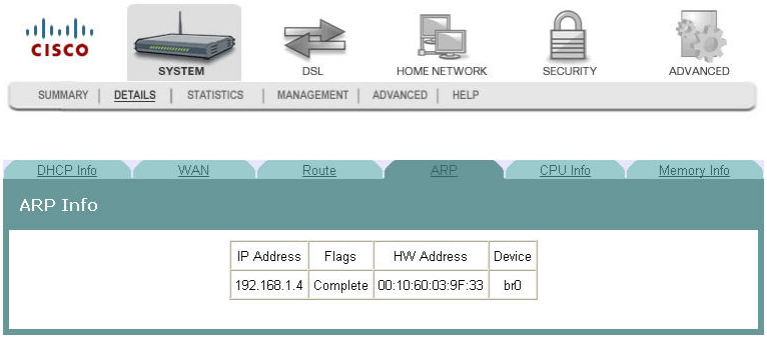
Path: System > Details > Route



ARP Information

The ARP Info screen displays the Address Resolution Protocol (ARP) table. This table shows the IP address to MAC address mapping.

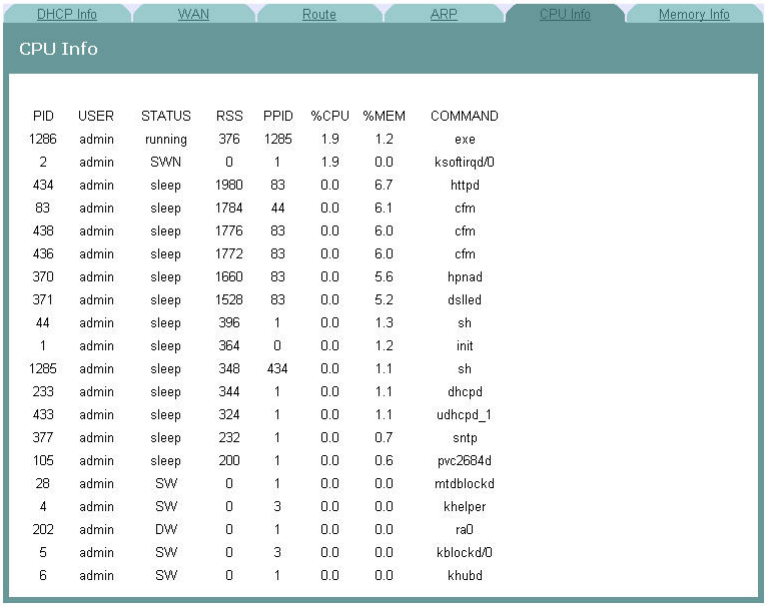
Path: System > Details > ARP



CPU Information

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

Path: System > Details > CPU Info

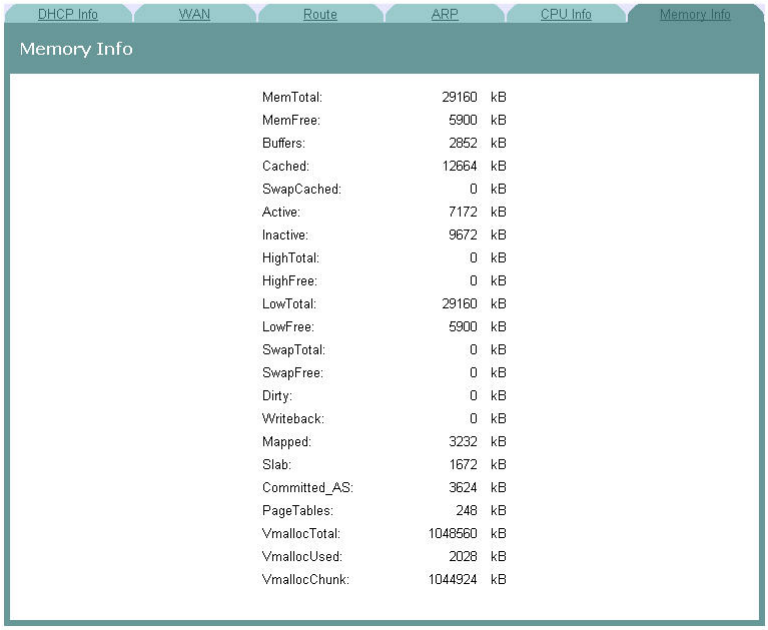


PID	USER	STATUS	RSS	PPID	%CPU	%MEM	COMMAND
1286	admin	running	376	1285	1.9	1.2	exe
2	admin	SWN	0	1	1.9	0.0	ksoftirqd/0
434	admin	sleep	1980	83	0.0	6.7	httpd
83	admin	sleep	1784	44	0.0	6.1	cfm
438	admin	sleep	1776	83	0.0	6.0	cfm
436	admin	sleep	1772	83	0.0	6.0	cfm
370	admin	sleep	1660	83	0.0	5.6	hpnad
371	admin	sleep	1528	83	0.0	5.2	dslled
44	admin	sleep	396	1	0.0	1.3	sh
1	admin	sleep	364	0	0.0	1.2	init
1285	admin	sleep	348	434	0.0	1.1	sh
233	admin	sleep	344	1	0.0	1.1	dhcpd
433	admin	sleep	324	1	0.0	1.1	udhcpd_1
377	admin	sleep	232	1	0.0	0.7	sntp
105	admin	sleep	200	1	0.0	0.6	pvc2684d
28	admin	SW	0	1	0.0	0.0	mtdblockd
4	admin	SW	0	3	0.0	0.0	khelper
202	admin	DW	0	1	0.0	0.0	ra0
5	admin	SW	0	3	0.0	0.0	kblockd/0
6	admin	SW	0	1	0.0	0.0	khubd

Memory Information

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

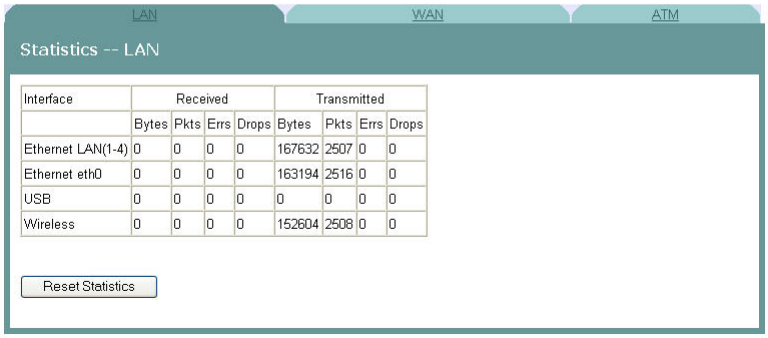
Path: System > Details > Memory Info



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



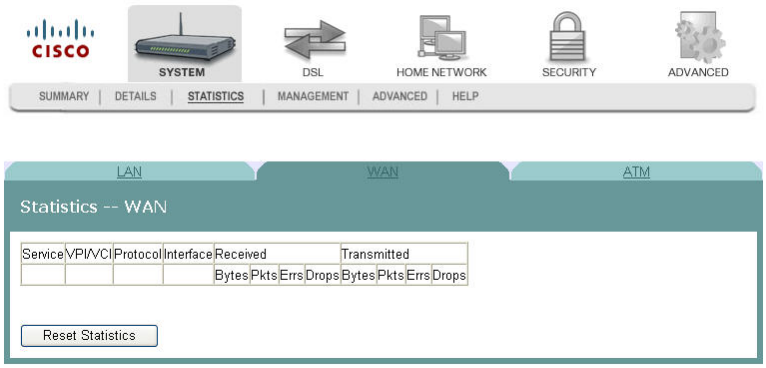
Reset Statistics

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



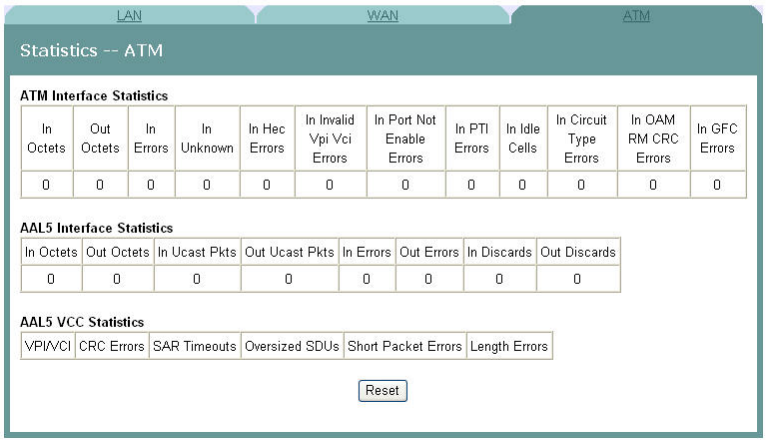
Reset Statistics

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 Statistics

The Statistics -- ATM 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



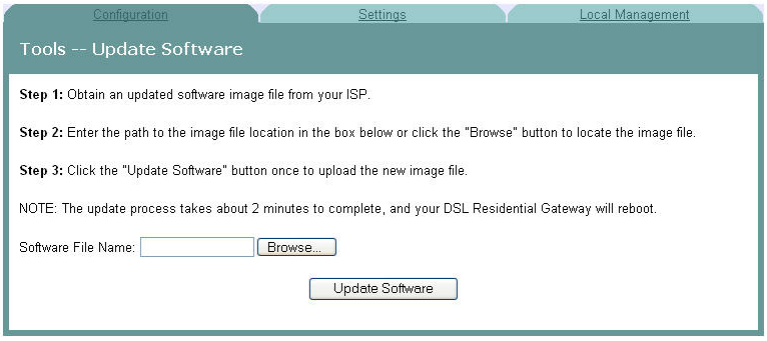
Reset Statistics

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.

Tools Update Software

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

Path: System > Management > Configuration > Update Software

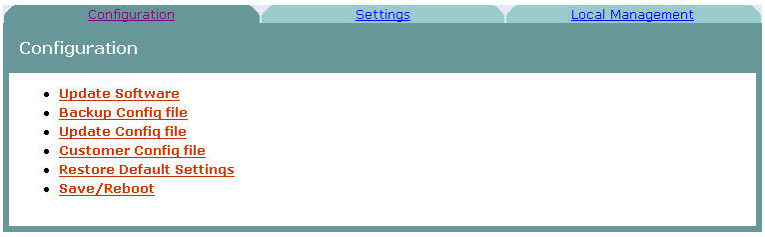


Updating Software

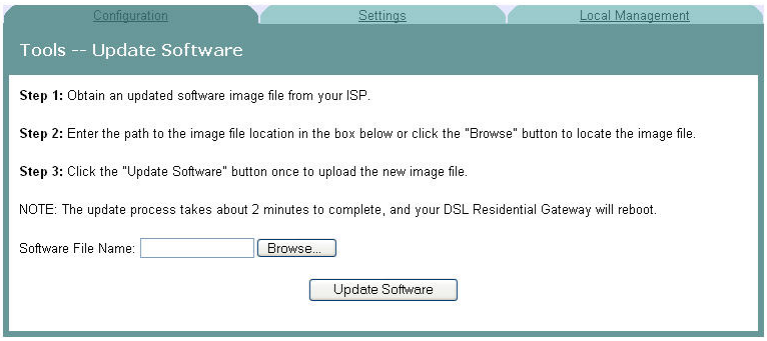
To update the software for the residential gateway, complete the following steps.

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

2 Click **Management**. The Configuration screen opens with the Configuration tab in the forefront.



3 Click **Update Software**. The Tools Update Software screen opens.



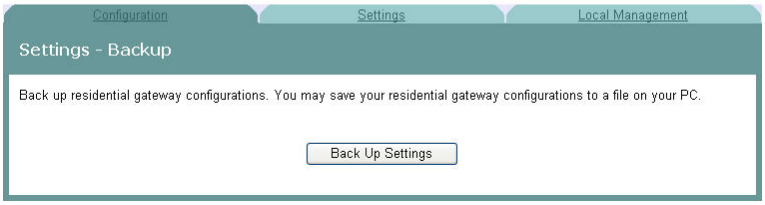
4 In the Software File Name field, click **Browse** to locate the software image file.

5 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 update is complete.

Settings Backup

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

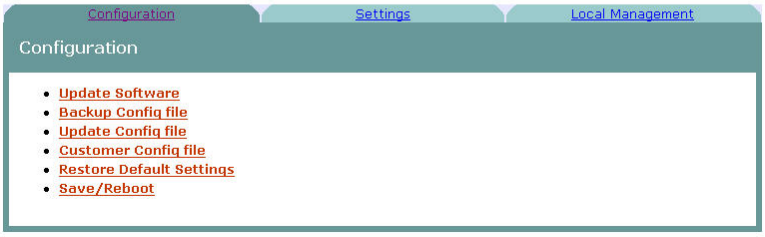
Path: System > Management > Configuration > Back Up Config File



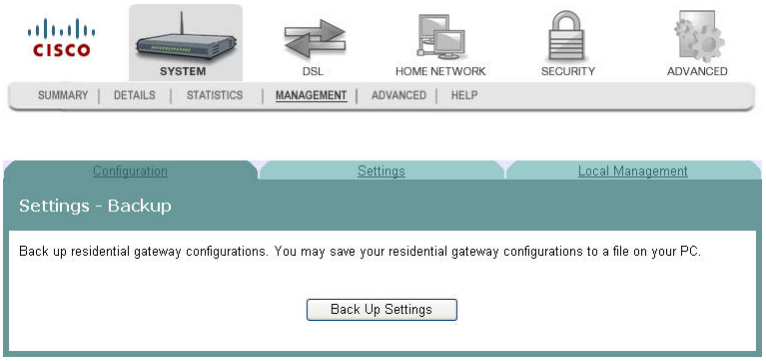
Backing Up Configuration Settings

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

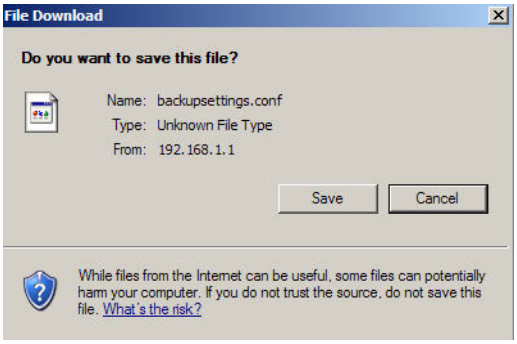
1. Click **System** on the main screen.
2. Click **Management**. The Configuration screen opens with the Configuration tab in the forefront.



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



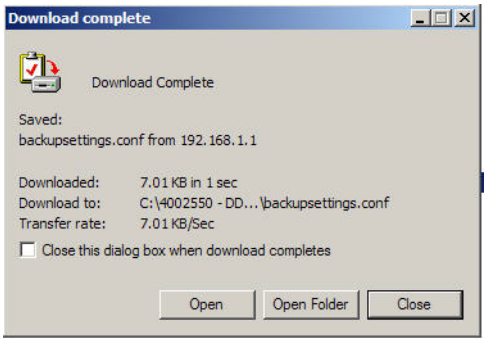
4 Click **Back Up Settings**. The following screen is displayed.



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.

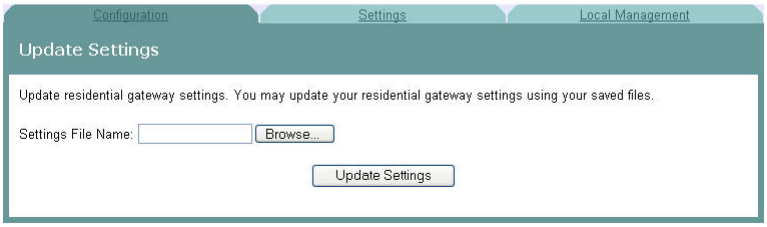
7 Click **Save** to save a backup of the configuration. The system displays a message when the download of the file is complete.



Update Settings

The Update Settings screen allows you to update the settings for the residential gateway from a source file. We recommend that you use this feature if you want to set up multiple residential gateways with a similar configuration.

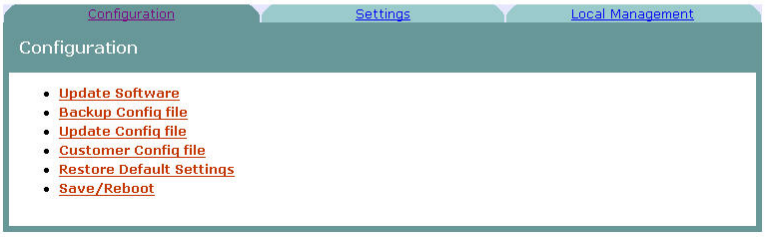
Path: System > Management > Configuration > Update Config File



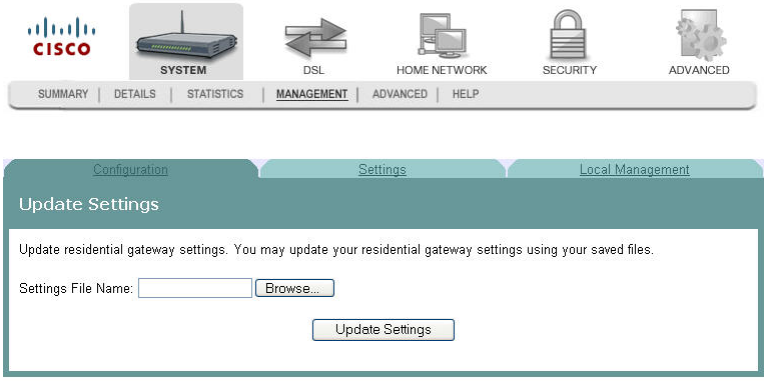
Updating Configuration Settings

To update the configuration settings 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 **Update Config file**. The 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.

Customer Configuration File

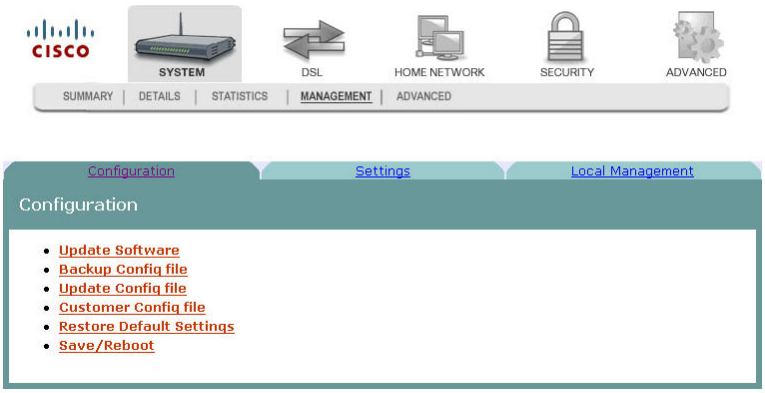
You can upload a previously saved configuration file to be the device's default factory settings. When you upload this file, the device will be reset to your customized configuration file instead of the factory default configuration file. The customer configuration file contains specific settings for your system.

Note: If you need to revert to the factory default settings, you can press the Restore Default Settings button on the screen or the Reset button on the device. For more information, see ***Restore Default Settings*** (on page 44).

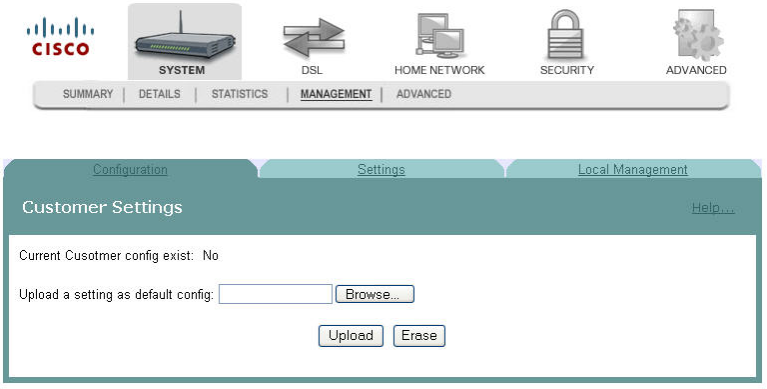
Path: System > Management > Configuration > Update Config File

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

2 Click **Management**. The Configuration screen opens with the Configuration tab in the forefront.



3 Click **Customer Config file**. The Customer Settings screen opens.



4 Click **Browse** to select the configuration file that you have previously saved.

5 Click **Upload** to upload your configuration file. You may also delete your uploaded configuration file by pressing the Erase button on the screen.

Notes:

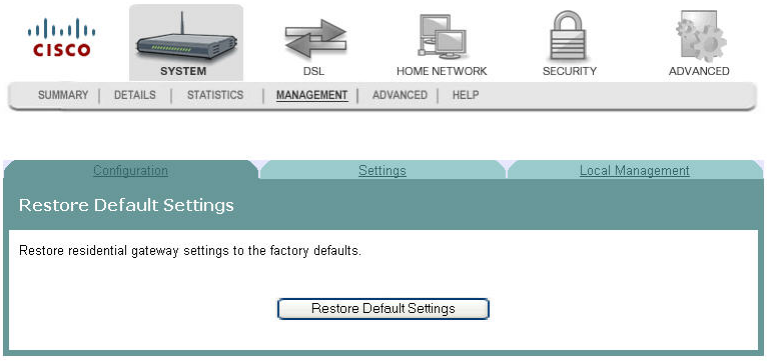
- When you delete your uploaded customer config file by clicking Erase, the system reverts to the device's original default factory settings. If you do not erase the uploaded customer config file, the system will not revert to the device's original default factory setting when you press Restore Default Settings or click the Reset button on the device. If the uploaded customer config file exists, the system will reset to the new setting when you click Restore Default Settings or the Reset button on the device. The new setting in the customer config file is the default config settings now after you uploaded the customer config file.
- Your current configuration will not be deleted when you upload your configuration file. Please do not confuse this with the Update Config File utility.

Restore Default Settings

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

Note: You can also reset the device by inserting a sharp instrument, such as a paper clip, in the reset area on the back of the residential gateway.

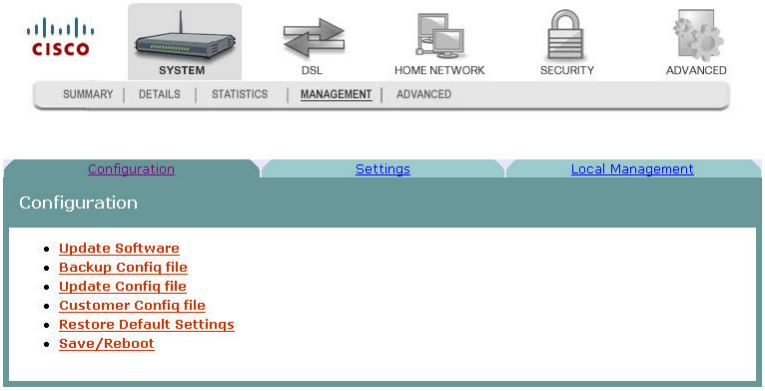
Path: System > Management > Configuration > Restore Default Settings



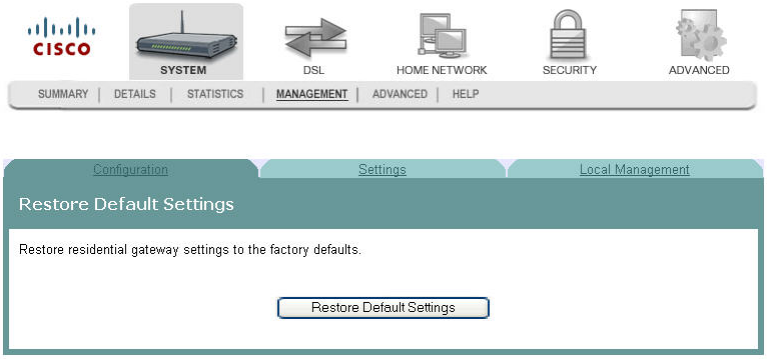
Restoring the Configuration to the Default Settings

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

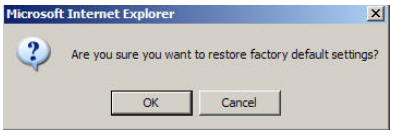
1. Click **System** on the main screen.
2. Click **Management**. The Configuration screen opens with the Configuration tab in the forefront.



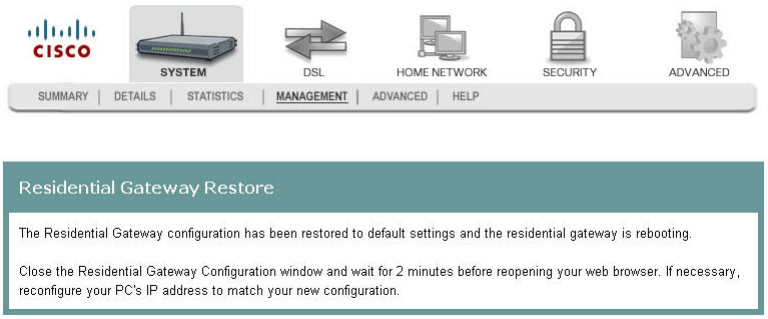
3 Click **Restore Default Settings**. The Tools Restore Default Settings screen opens.



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



5 Click **OK**. The system displays the following message:



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

Saving the Configuration for the Residential Gateway

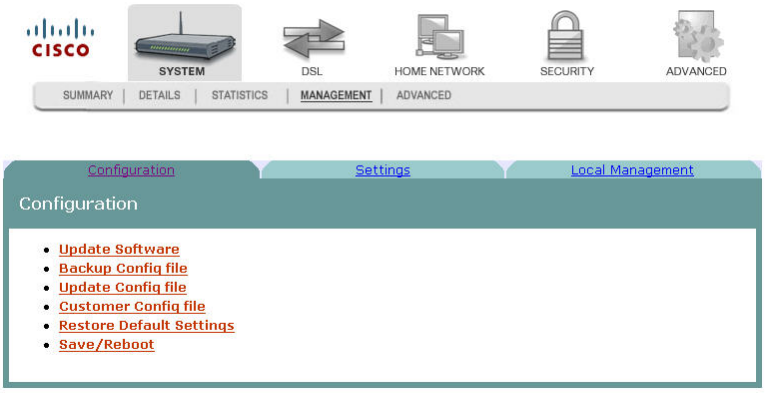
The Reboot the Residential Gateway screen allows you to save any configuration changes and to reboot the router to make the changes take effect.

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

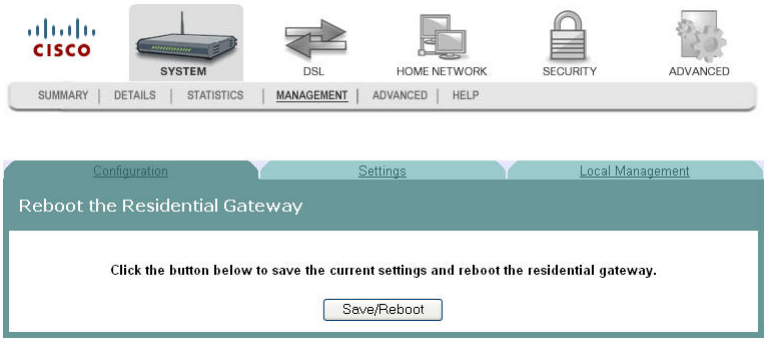
Saving the Configuration and Rebooting the Residential Gateway

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

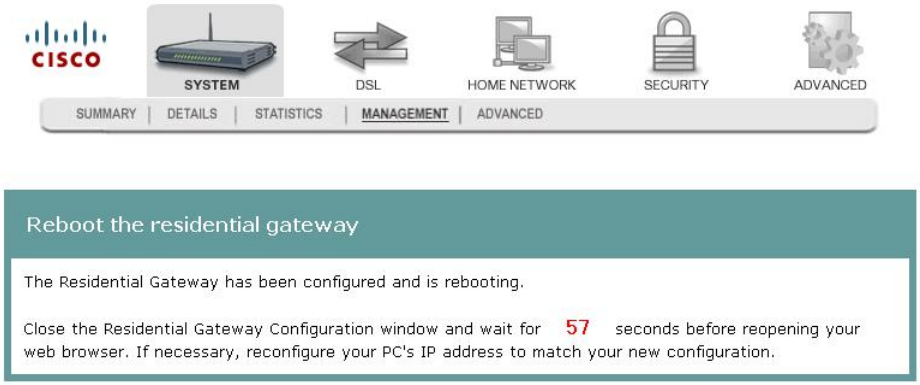
1. Click **System** on the main screen.
2. Click **Management**. The Configuration screen opens with the Configuration tab in the forefront.



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



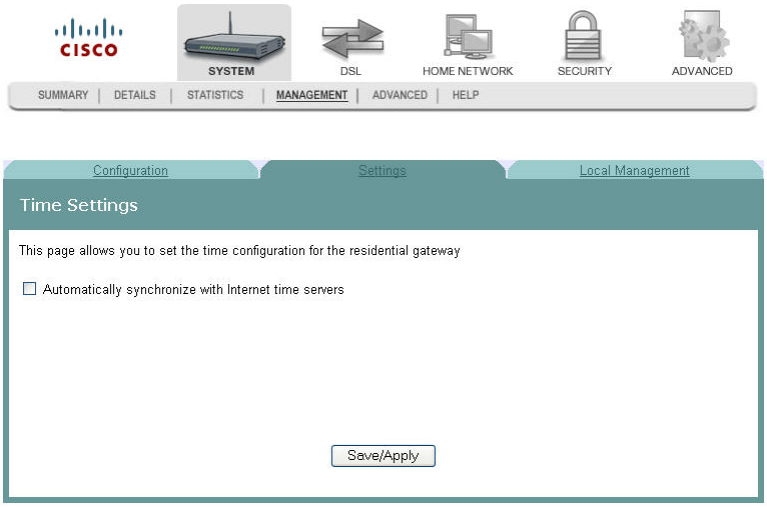
4 Follow the instructions on the screen to save the configuration and to reboot the router. The residential gateway displays the following message shown below. The System Summary screen opens when the residential gateway has finished rebooting. The new settings are displayed.



Time Settings

The Time Settings screen allows you to synchronize the time for the residential gateway with a network-based time server.

Path: System > Management > Settings > Internet Time

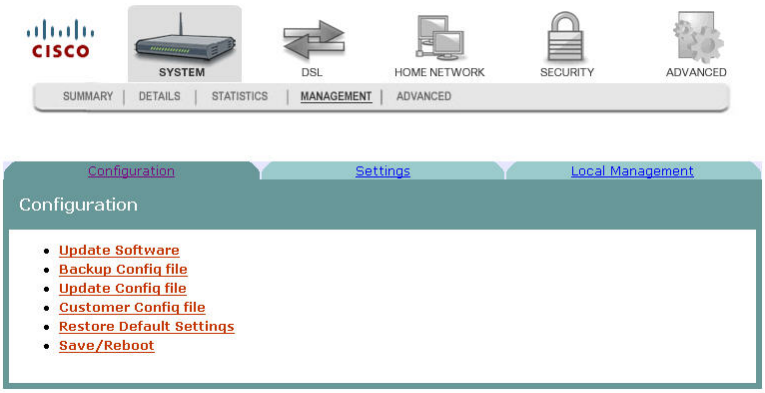


Synchronize with Internet Time

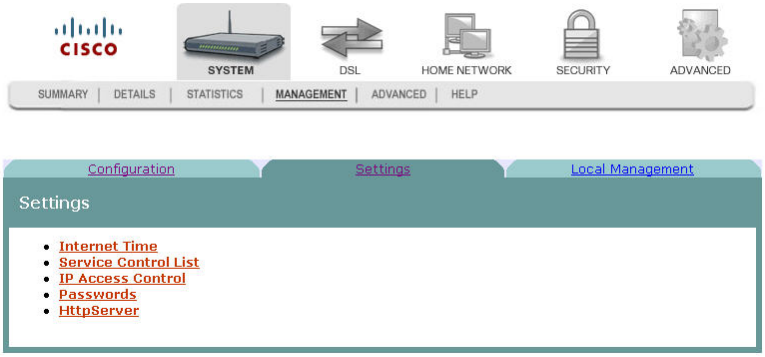
To synchronize the time for the residential gateway with the Internet time, complete the following steps.

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

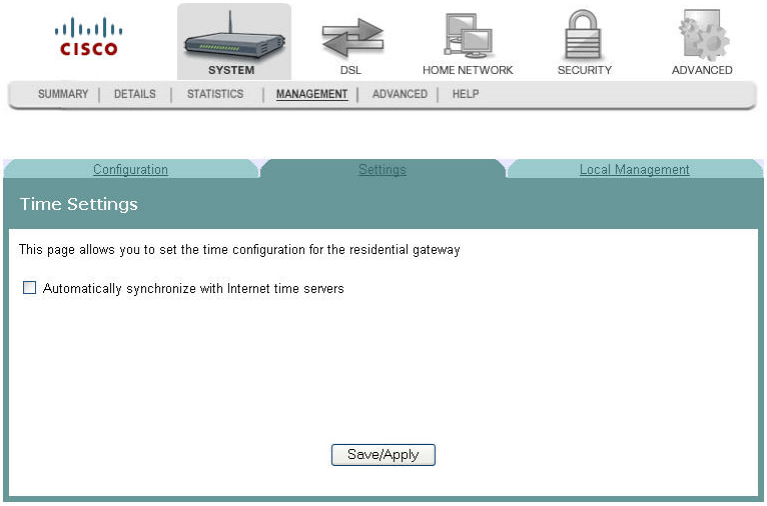
2 Click **Management**. The Configuration screen opens with the Configuration tab in the forefront.



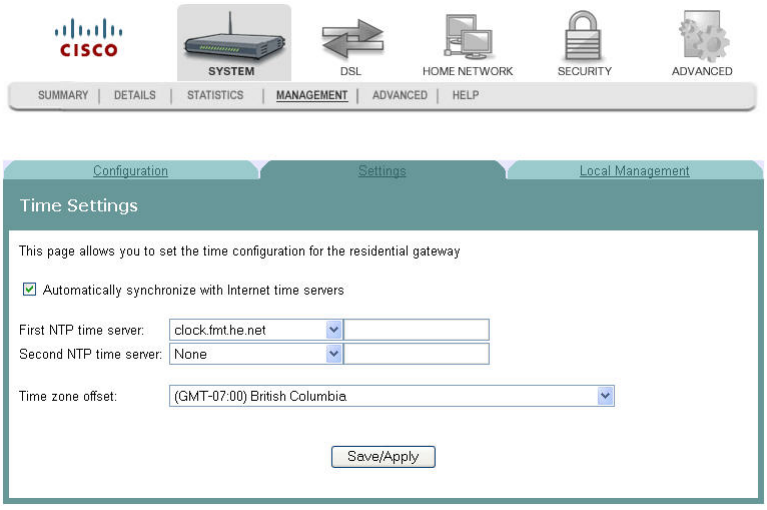
3 Click the **Settings** tab. The Settings screen opens.



4 Click **Internet Time**. The Time Settings screen opens.



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



6 In the First NTP time server field, select a time server from the drop-down list. If you select Other, enter the name of the server in the blank field.

7 In the Second NTP time server field, select a time server from the drop-down list. If you select Other, enter the name of the server in the blank field.

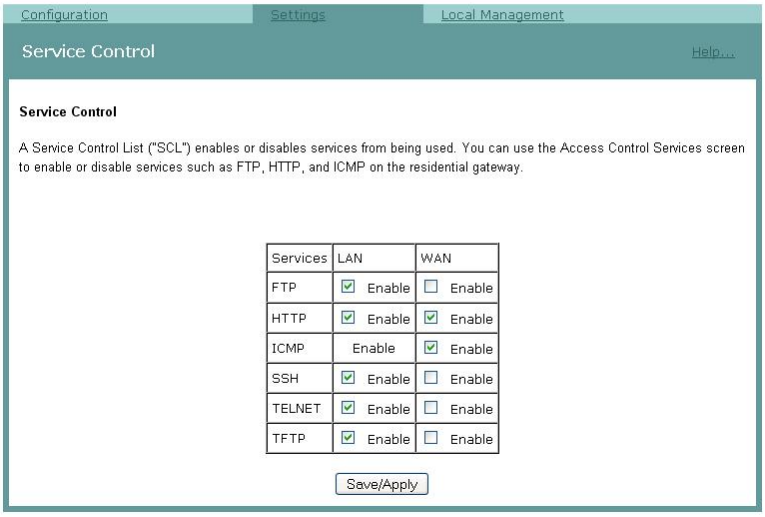
8 In the Time zone offset field, select the time zone specific to your area.

9 Click **Save/Apply**.

Service Control

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

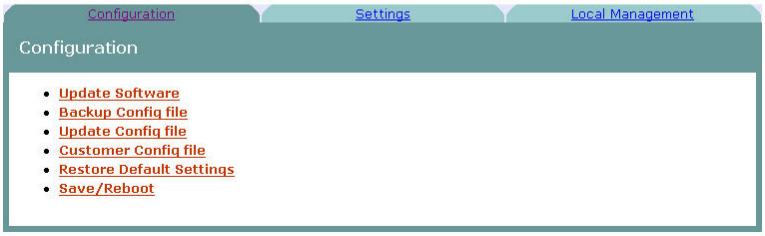
Path: System > Management > Settings > Service Control List



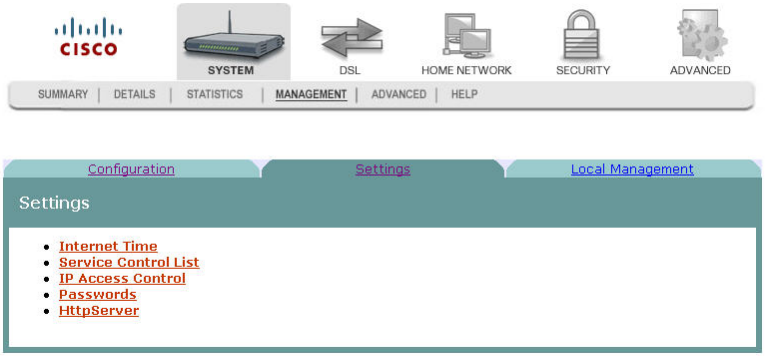
Enabling or Disabling Services

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

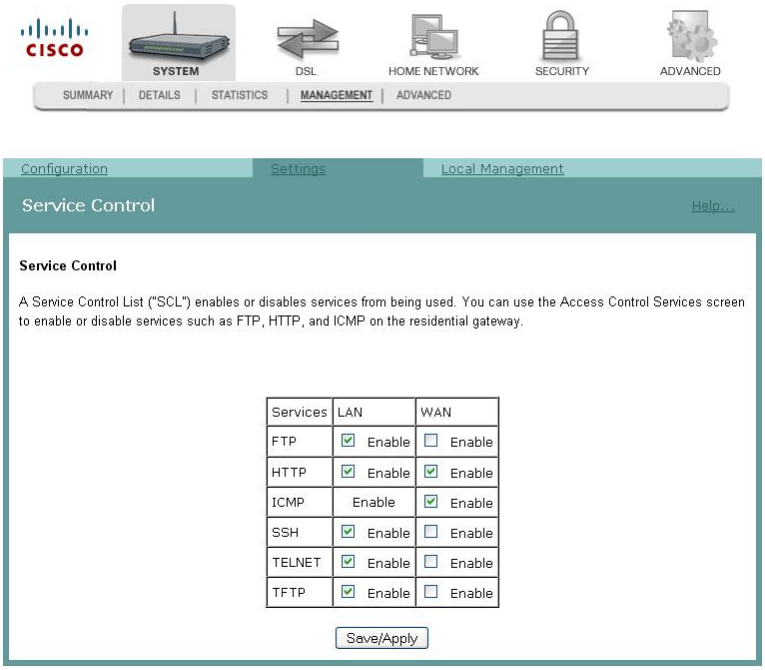
1. Click **System** on the main screen.
2. Click **Management**. The Configuration screen opens with the Configuration tab in the forefront.



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



4 Click **Service Control List**. The Service Control screen opens.



5 To enable or disable a service, do the following:

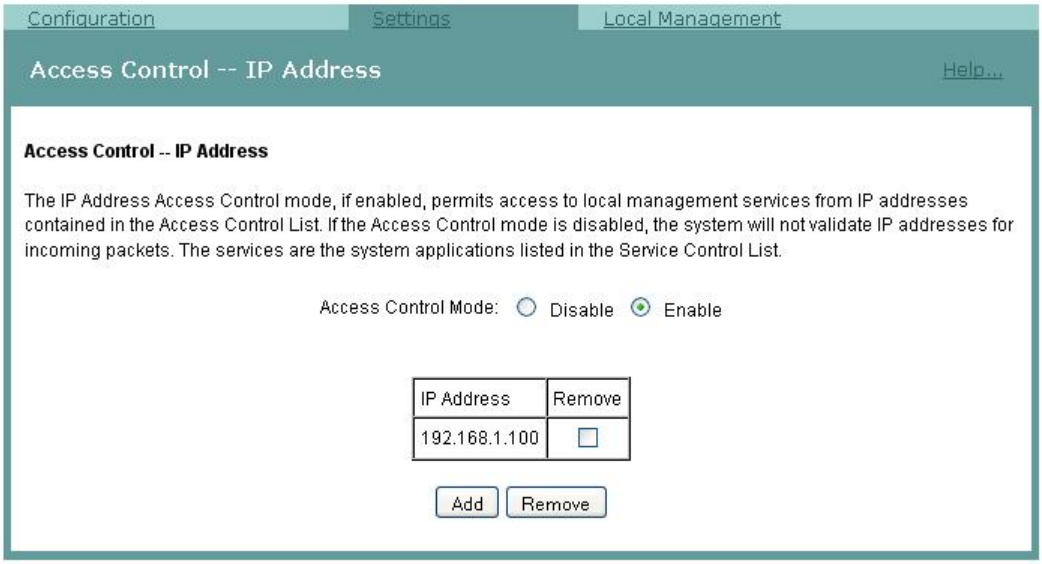
- To enable a service, select the check box next to the service you want to enable. A check box with a check indicates that the service is enabled.
- To disable a service, de-select the check box next to the service you want to disable. A check box without a check indicates that the service is disabled.

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, you cannot configure the residential gateway from non-local IP addresses. For example, you can use this feature to prevent a remote site from configuring the residential gateway. The services are the system applications listed in the Service Control List.

Path: System > Management > Settings > IP Access Control

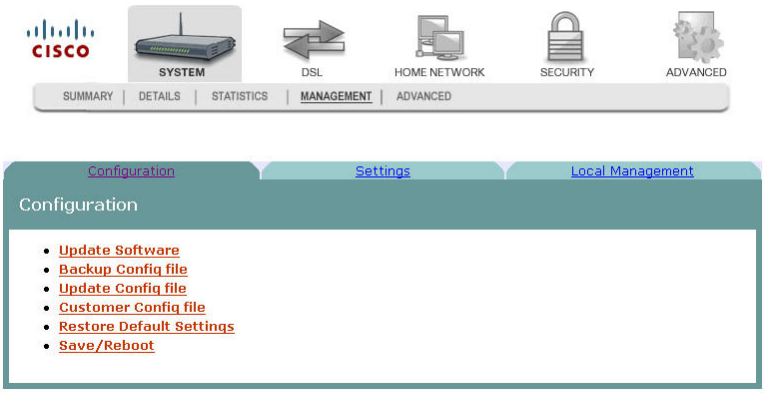


Adding IP Address Access Control

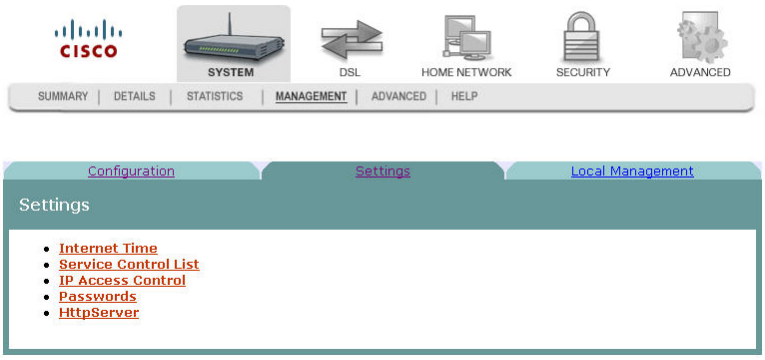
To add IP address access control, complete the following steps.

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

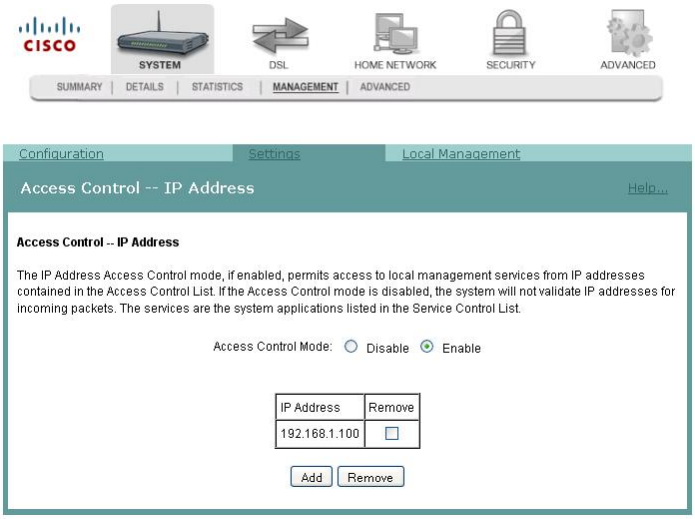
2 Click **Management**. The Configuration screen opens with the Configuration tab in the forefront.



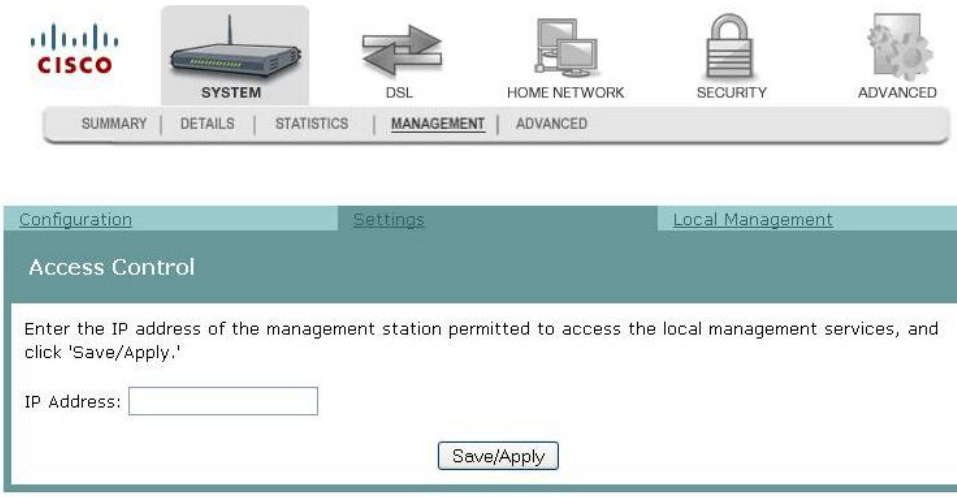
3 Click the **Settings** tab. The Settings screen opens.



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

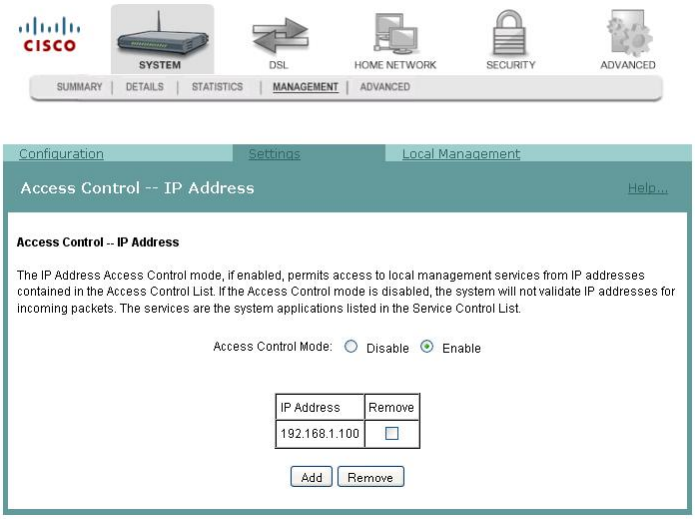


5 Click **Add**. The Access Control screen opens. In the IP Address field, enter the IP address of the management station that you want to allow access to the local management services.



6 Click **Save/Apply** to allow access for the IP address you entered.

7 Enable the Access Control Mode as shown in the following screen.



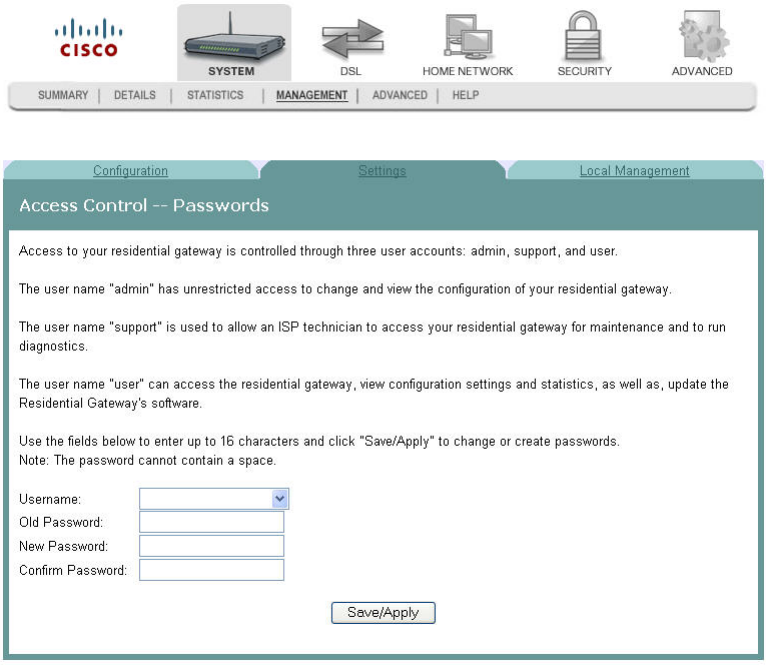
Password Access to the Residential Gateway

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. This login allows access to privileged information.
- 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.

The admin login provides access to all screens (including privileged information) for the residential gateway. The support login and user login provide access to only a subset of the screens provided to the admin login.

Path: System > Management > Settings > Passwords

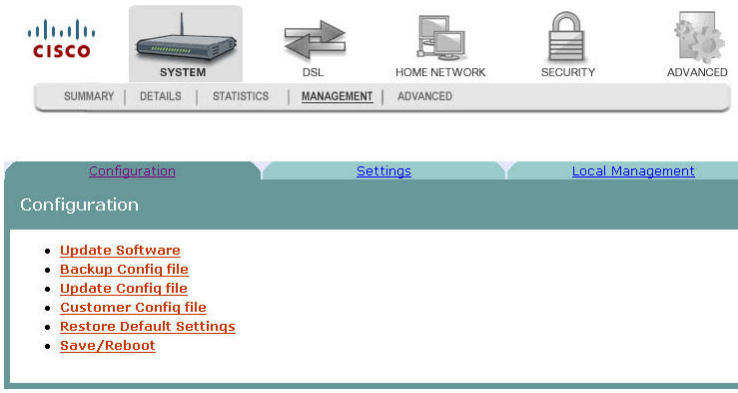


Creating Passwords

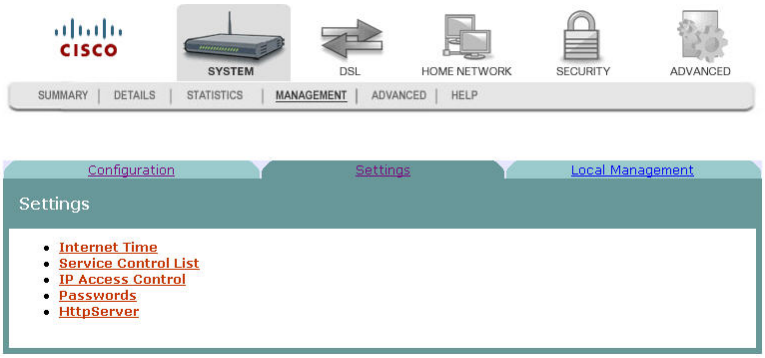
To create passwords for the residential gateway, complete the following steps.

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

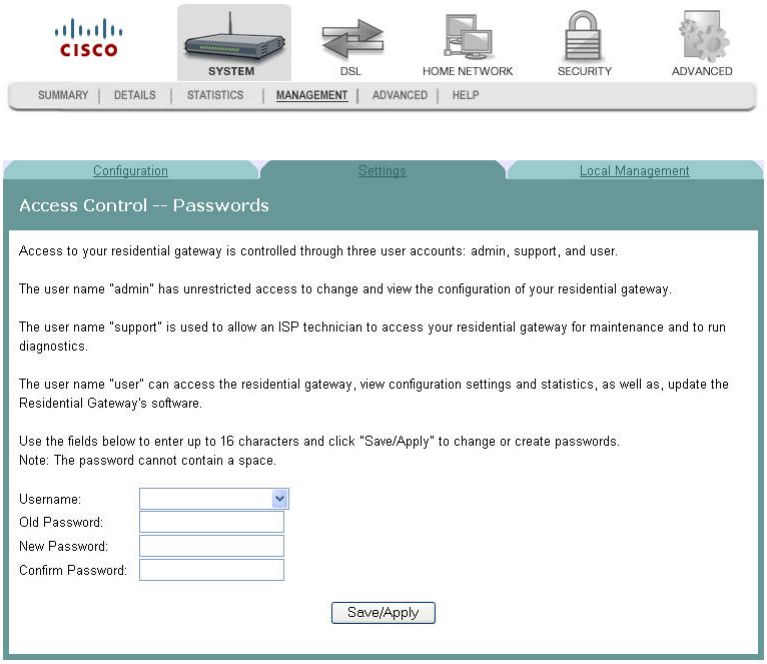
2 Click **Management**. The Configuration screen opens with the Configuration tab in the forefront.



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



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



5 In the Username field from the drop-down list, select the type of password you are creating: admin, support, or user. The default user name is admin.

6 In the Old Password field, enter the old password. The maximum character length is 16 characters, and passwords cannot contain a space. The default password is admin.

7 In the New Password field, enter the new password. The maximum character length is 16 characters, and passwords cannot contain a space.

8 In the Confirm Password field, enter the new password again to confirm your entry.

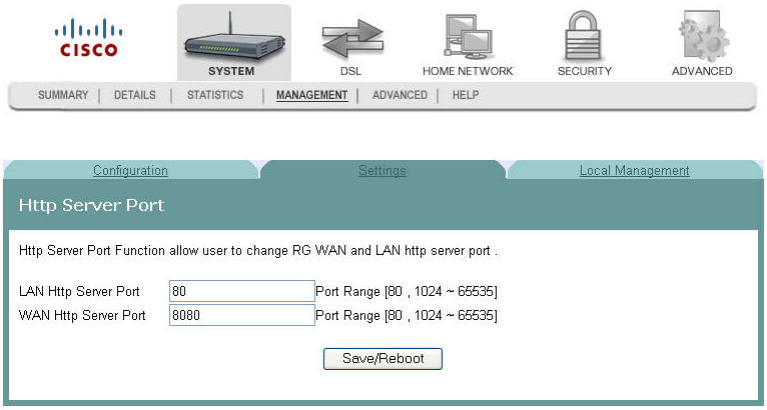
9 Click **Save/Apply** to save the password.

Tip: Another quick way to change passwords is to go to the System (home) page. Scroll down to the last option and click **Password Setting**. A popup window opens as shown below. Use this screen to enter your new passwords.

HTTP Server Port

The HTTP Server Port screen allows you to specify the TCP port for the HTTP server on both the LAN and WAN interfaces.

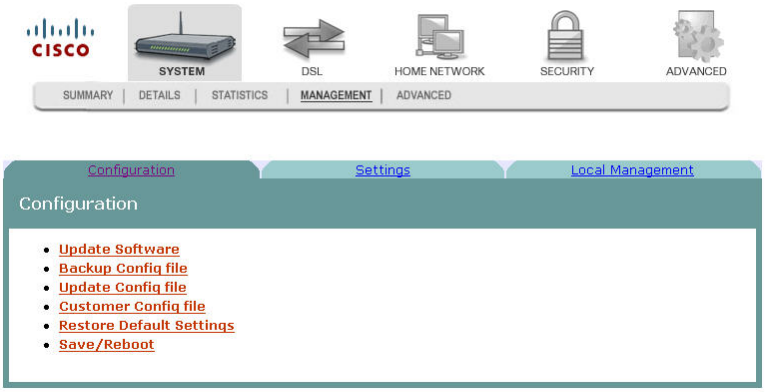
Path: System > Management > Settings > HttpServer



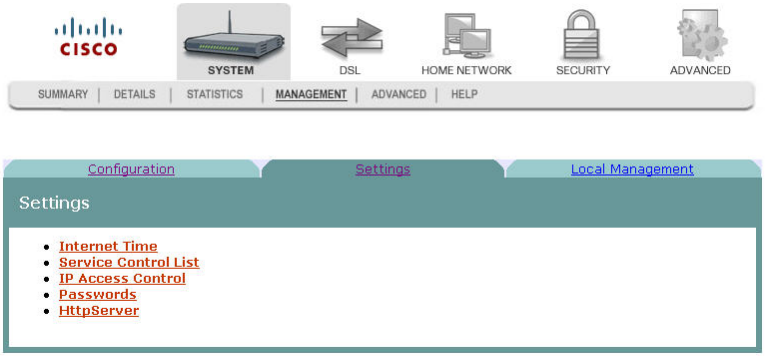
Modifying the HTTP Server Ports

To modify the HTTP Server ports, complete the following steps.

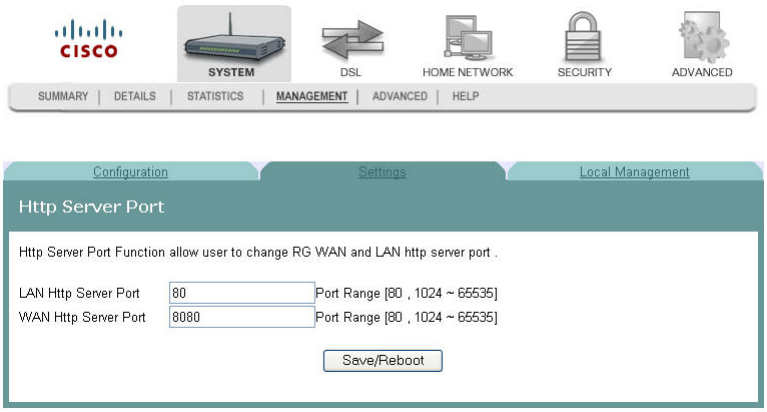
1. Click **System** on the main screen.
2. Click **Management**. The Configuration screen opens with the Configuration tab in the forefront.



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



4 Click **HttpServer**. The Http Server Port opens.



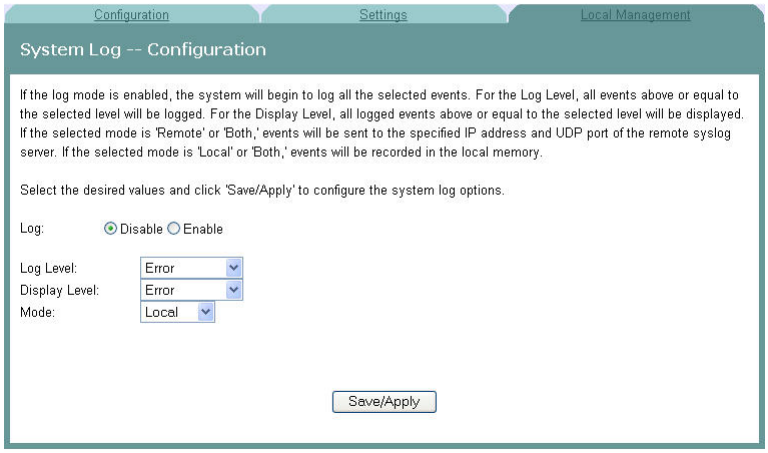
5 In the LAN Http Server Port field, enter the port number for the HTTP server from the LAN side.

6 In WAN Http Server Port field, enter the port number for the HTTP server from the WAN side.

System Log Configuration

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

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

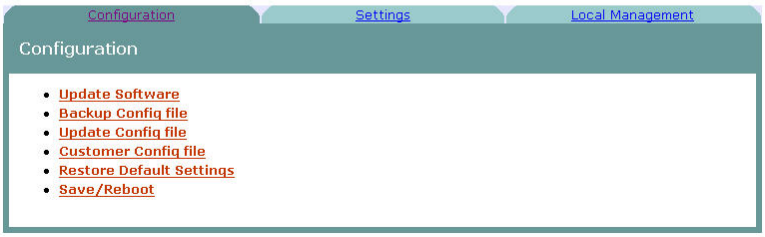


Logging Events

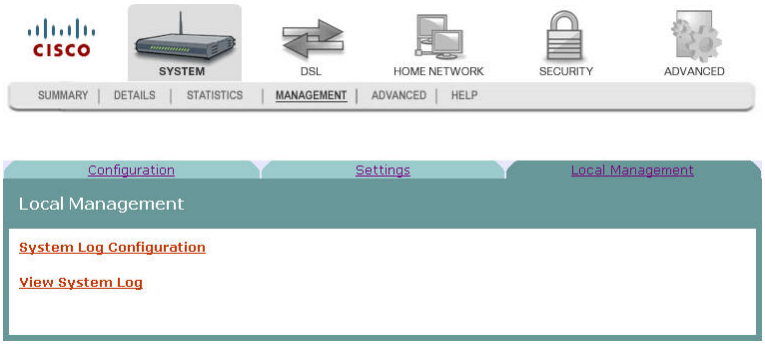
To log selected events, complete the following steps.

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

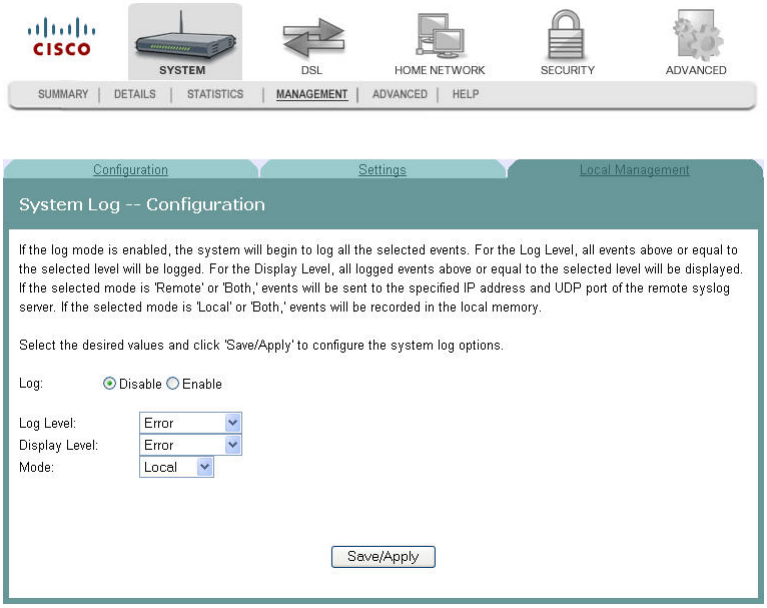
2 Click **Management**. The Configuration screen opens with the Configuration tab in the forefront.



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



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** and go to step 6.
- 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

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 are sent to the specified IP address and UDP port of the remote syslog server. If the selected mode is "local" or "both," events are recorded in the local memory.

- Local. Events are logged in memory. You must log in to the device to display the events.
- Remote. Events log is sent to a remote server (syslog server).
- Both. Events are logged in memory and are sent to the remote server.

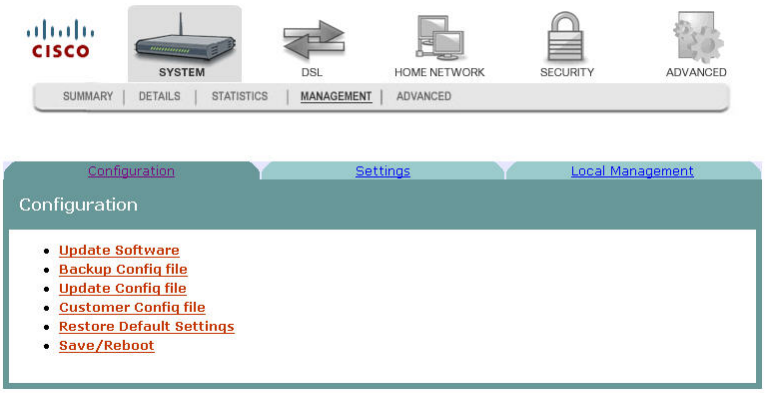
9 Click **Save/Apply** to start logging events.

Disabling Logging

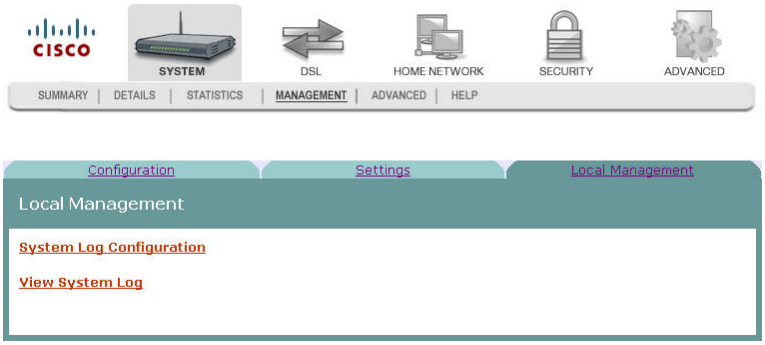
To disable the logging function, complete the following steps.

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.



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

5 In the Log field, click **Disable**.

6 In the Log Level field, select from the following options to indicate the level of alarms to be logged:

- Emergency
- Alert
- Optical
- Error
- Warning
- Notice
- Informational
- Debugging

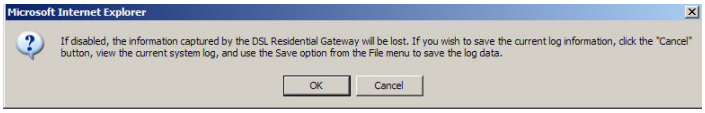
7 In the Display Level field, select from the following options to indicate the level of alarms that you want displayed:

- Emergency
- Alert
- Optical
- Error
- Warning
- Notice
- Informational
- Debugging

8 In the Mode field, select from the following options to indicate the location to store the logs.

- Local. Store on the residential gateway.
- Remote. Store on a remote log server.
- Both. Store on the residential gateway and on the remote log server.

9 Click **Save/Apply**. The following prompt appears alerting you that you will lose any information captured by the residential gateway:



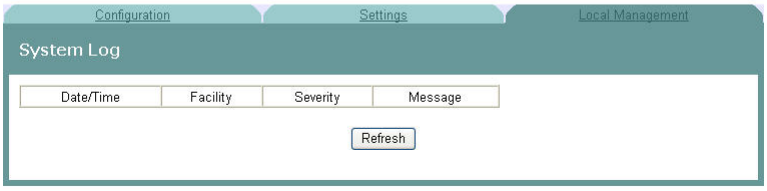
10 Are you sure you want to disable logging and lose the captured data?

- If **yes**, click **OK** to turn off logging.
- If **no**, click **Cancel**.

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

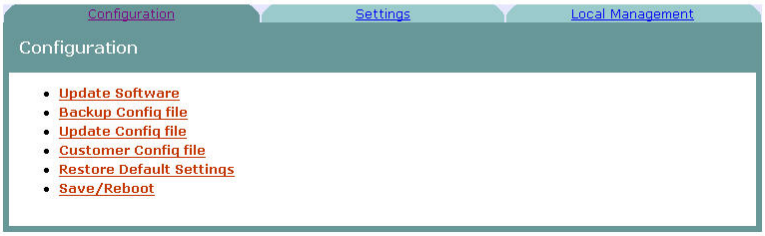


Viewing System Logs

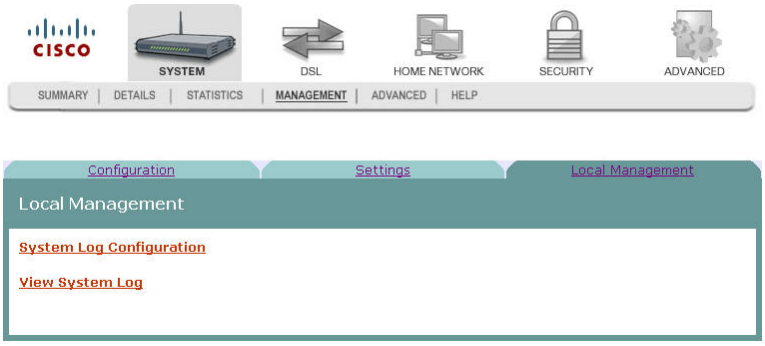
To view the system log for the residential gateway, complete the following steps.

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

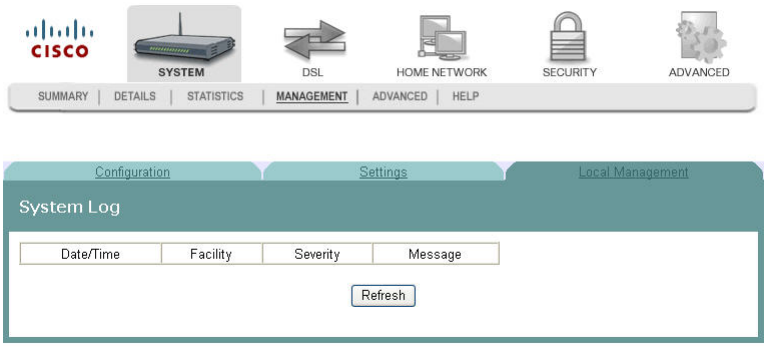
2 Click **Management**. The Configuration screen opens with the Configuration tab in the forefront.



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



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



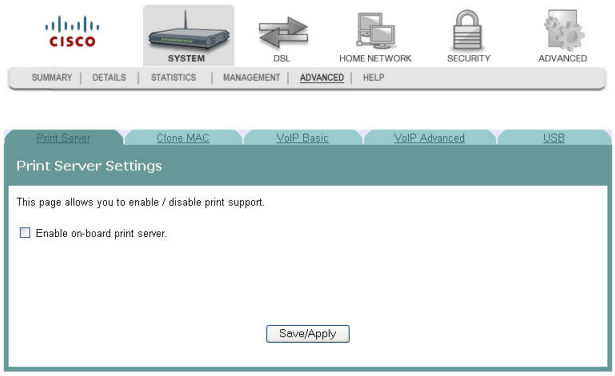
5 Review the log entries on the screen.

6 Click **Refresh** to refresh the system log.

Print Server Settings

The Print Server Setting screen allows you to enable or disable printer support from the USB connection.

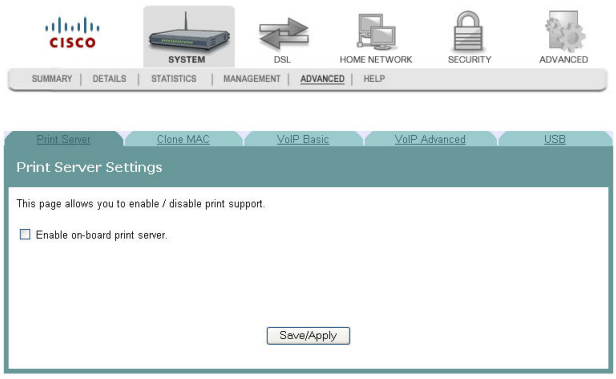
Path: System > Advanced > Print Server



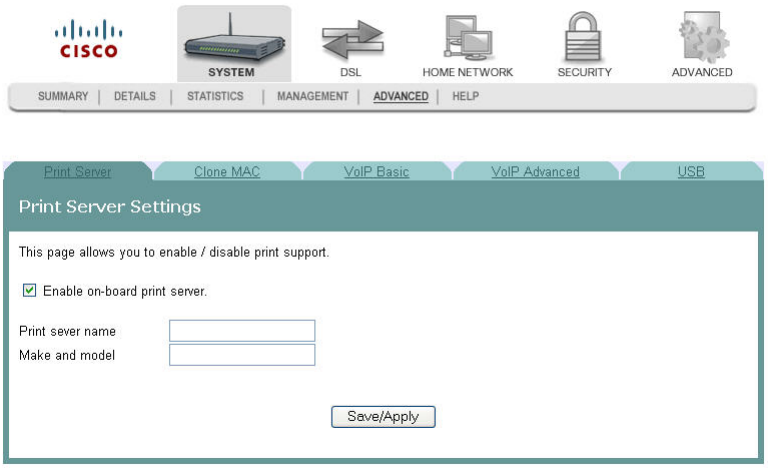
Enabling the Print Server

To enable the print server, complete the following steps.

1. Click **System** on the main screen.
2. Click the **Advanced** tab. The Print Server settings screen opens with the Print Server tab in the forefront.



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



4 In the Print server name field, enter the name of the print server you want to enable.

5 In the Make and model field, enter the make and model of the printer.

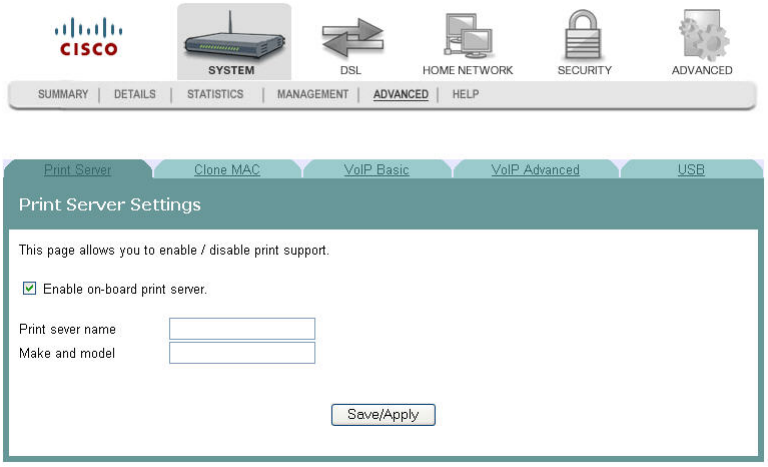
6 Click **Save/Apply** to enable the print server.

Disabling the Print Server

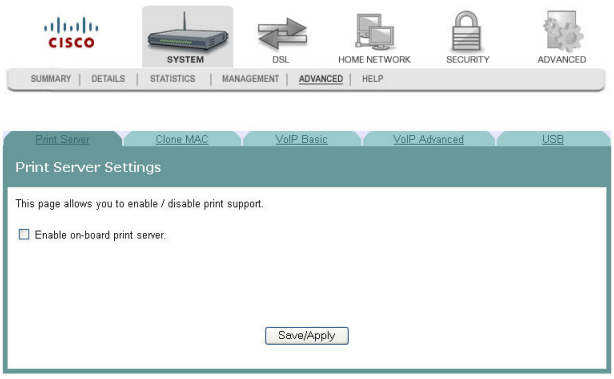
To disable the print server, complete the following steps.

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

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



3 Clear the Enable on-board print server check box. The screen refreshes and the fields for entering print server name, make, and mode are removed from the screen.

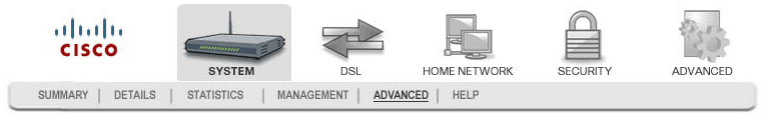


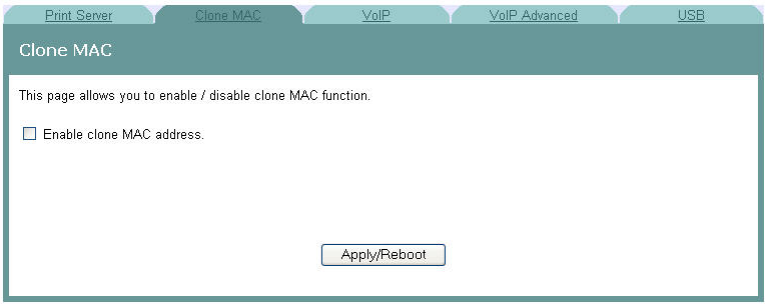
4 Click **Save/Apply** to disable the print server.

Clone MAC Addresses

The Clone MAC screen allows you to enable or disable the clone MAC function. The Clone MAC function allows you to clone MAC addresses so that the residential gateway assumes the MAC address of an attached device or a user-specified MAC address.

Path: System > Advanced > Clone MAC

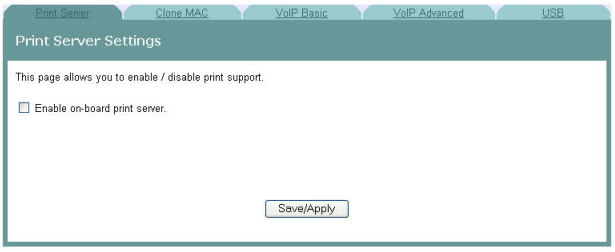




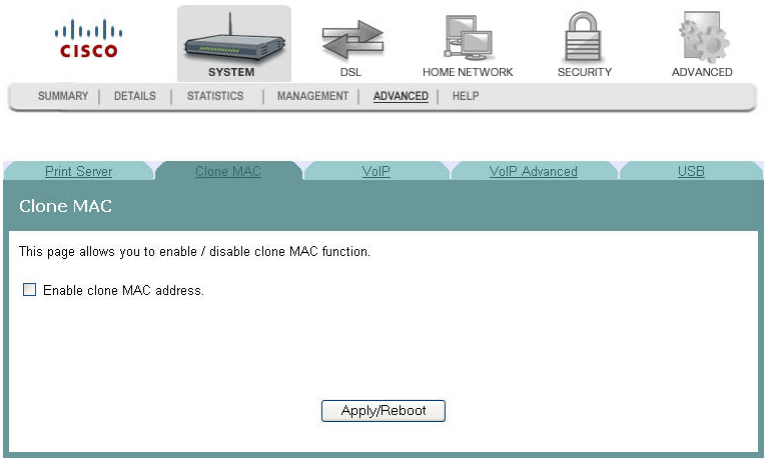
Enabling the Clone MAC Function

To enable the Clone MAC function, complete the following steps.

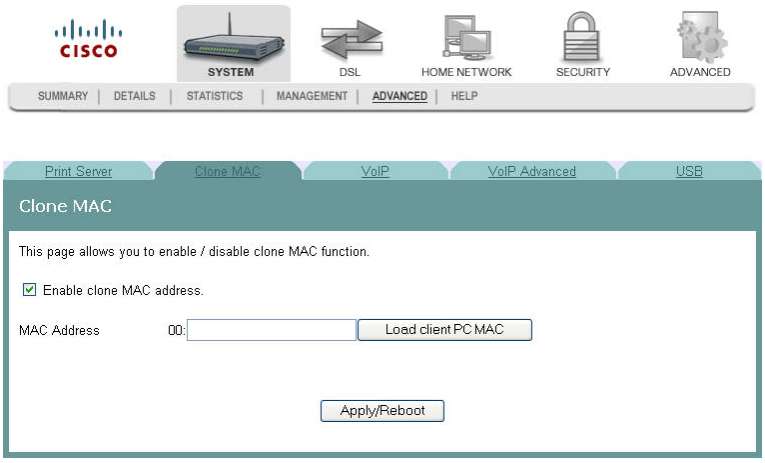
1. Click **System** on the main screen.
2. Click the **Advanced** tab. The Print Server settings screen opens with the Print Server tab in the forefront.



3 Click the **Clone MAC** tab.



4 Select the **Enable clone MAC address** check box. The screen populates with more fields.



5 In the MAC Address field, enter the MAC address that you want to clone. You can also click Load client PC MAC to locate an address you want to clone.

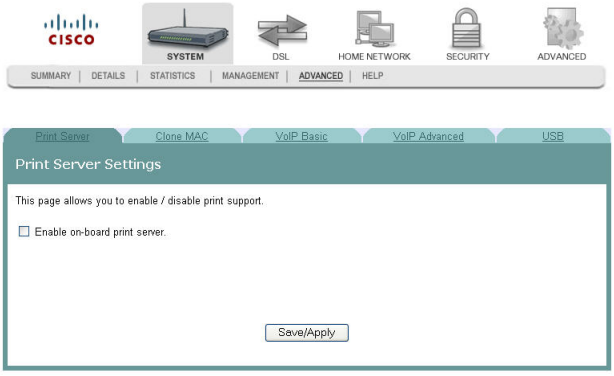
6 Click **Apply/Reboot** to clone the MAC address. The residential gateway reboots and assumes the MAC address you have specified.

Disabling the Clone MAC Function

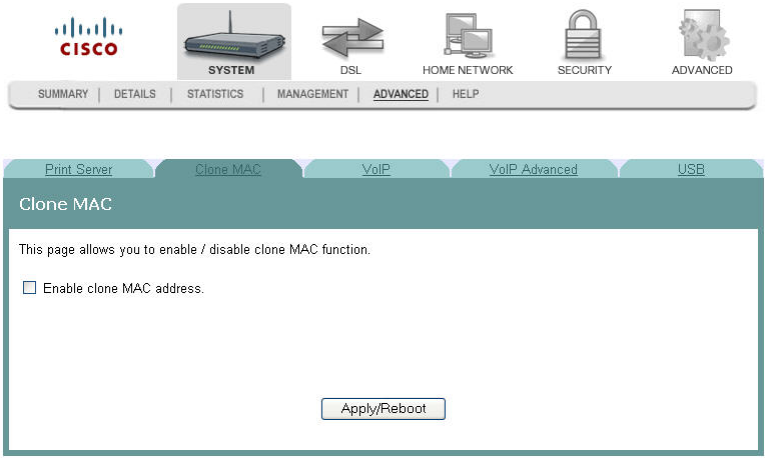
To disable the Clone MAC function, complete the following steps.

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

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



3 Click the **Clone MAC** tab.



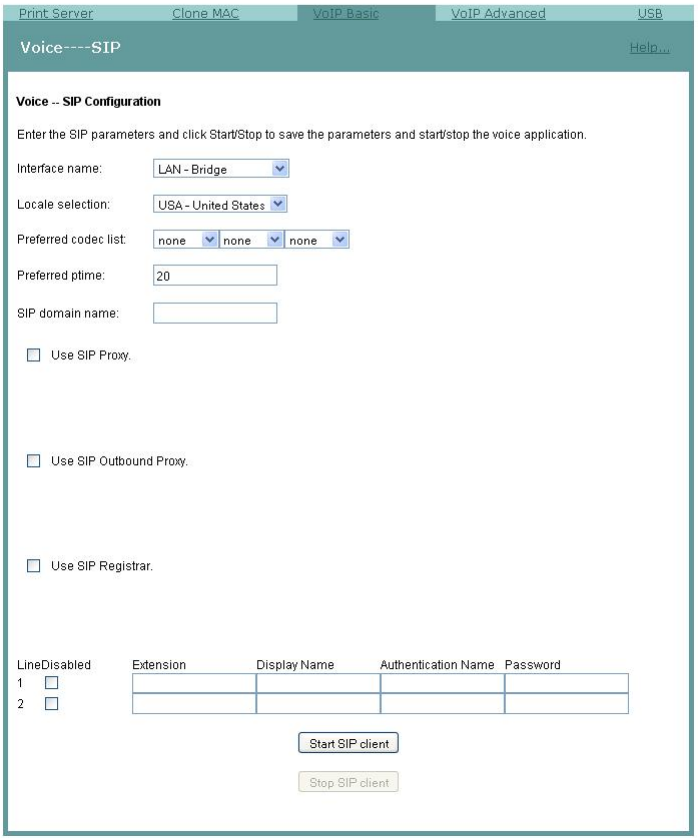
4 Uncheck the **Enable clone MAC address** check box. The screen refreshes and the field for entering the MAC address is removed from the screen.

5 Click **Apply/Reboot** to disable the Clone MAC function.

Voice SIP Basic Configuration

The Voice ---- SIP screen allows you to enter and save the session initiation protocol (SIP) parameters and to start and stop the voice application.

Path: System > Advanced > VoIP Basic

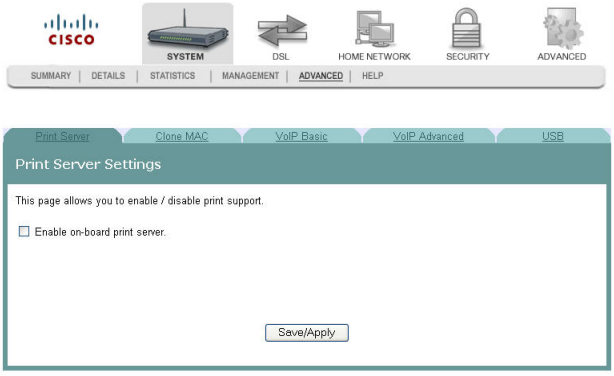


Setting Up VoIP

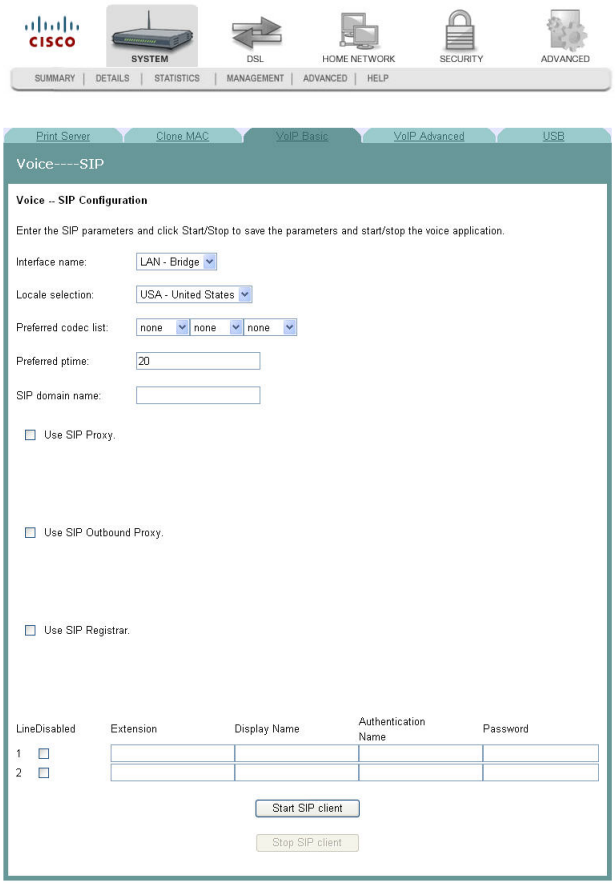
To enter the VoIP parameters, complete the following steps.

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

2 Click **Advanced**. The Print Server Settings screen opens with the Print Server tab in the forefront.



3 Click the **VoIP Basic** tab. The Voice ---- SIP screen opens.



4 In the Interface name field, select the interface you want to use for VoIP.

5 In the Locale selection field, select the country where you are located.

6 In the Preferred codec list field, select one of the following codec values:

Note: If you want to indicate an order of preference, enter a codec value for each column.

- G711U
- G711A
- G723
- G726
- G729
- BV16
- iLBC

7 In the Preferred ptime field, enter the time in seconds.

8 In the SIP domain name field, enter the domain name for the session initiation protocol (SIP) server.

9 Do you wish to use SIP Proxy?

- If **yes**, check the Use SIP Proxy check box. The SIP Proxy and the SIP Proxy port fields appear. Enter the SIP proxy server domain name or IP address and the SIP Proxy port.
- If **no**, make sure the Use SIP Proxy check box is unchecked.

10 Do you wish to use an SIP Outbound proxy?

- If **yes**, check the Use SIP Outbound Proxy check box. The SIP Outbound Proxy and the SIP Outbound Proxy port fields appear. Enter the SIP outbound proxy server domain name or IP Address and the SIP outbound proxy port.
- If **no**, make sure the Use SIP Outbound Proxy check box is unchecked

11 Do you wish to use SIP Registrar?

- If **yes**, check the Use SIP Registrar check box. The SIP Registrar and the SIP Registrar port fields appear. Enter the SIP registrar's domain name or IP address and the SIP registrar's port.
- If **no**, make sure the Use SIP Registrar check box is unchecked.

12 Do you want to disable the line?

- If **yes**, check the Line Disabled checkbox to disable the line and prevent the phone connecting to this line from working.
- If **no**, make sure the Line Disabled checkbox is unchecked. For normal operation, the Line Disabled Checkbox should be unchecked.

13 In the Extension field, enter the phone number (extension) for the VoIP line.

14 In the Display Name field, enter the name that you want to be displayed.

15 In the Authentication Name field, enter the name that you want to be authenticated.

16 In the Password field, enter the password for the extension. This allows you to authenticate the phone number.

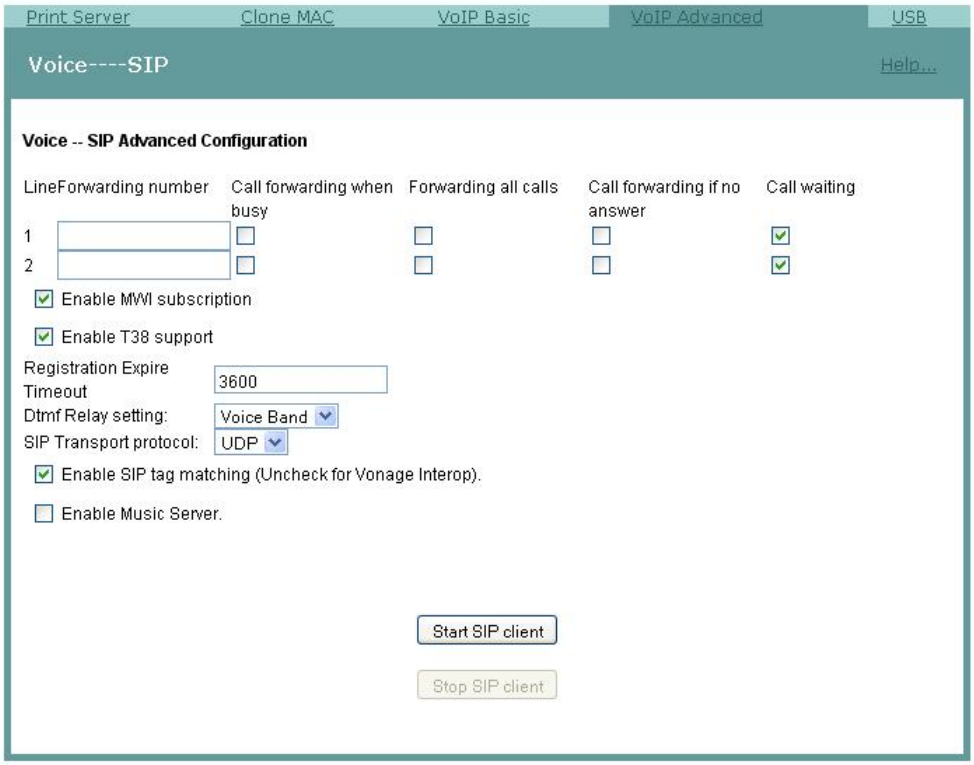
17 Do you want to activate the line?

- If **yes**, click **Start SIP client** to save your settings and to activate the line.
- If **no**, click **Stop SIP client** to deactivate the line.

Voice SIP Advanced Configuration

The Voice----SIP screen allows you to configure the more advanced VoIP features, such as call forwarding.

Path: System > Advanced > VoIP Advanced

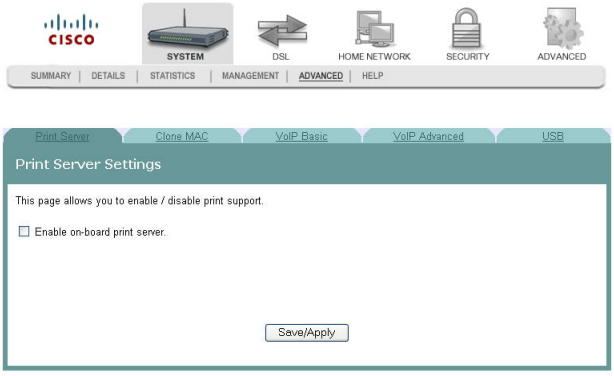


Setting Up Advanced VoIP Features

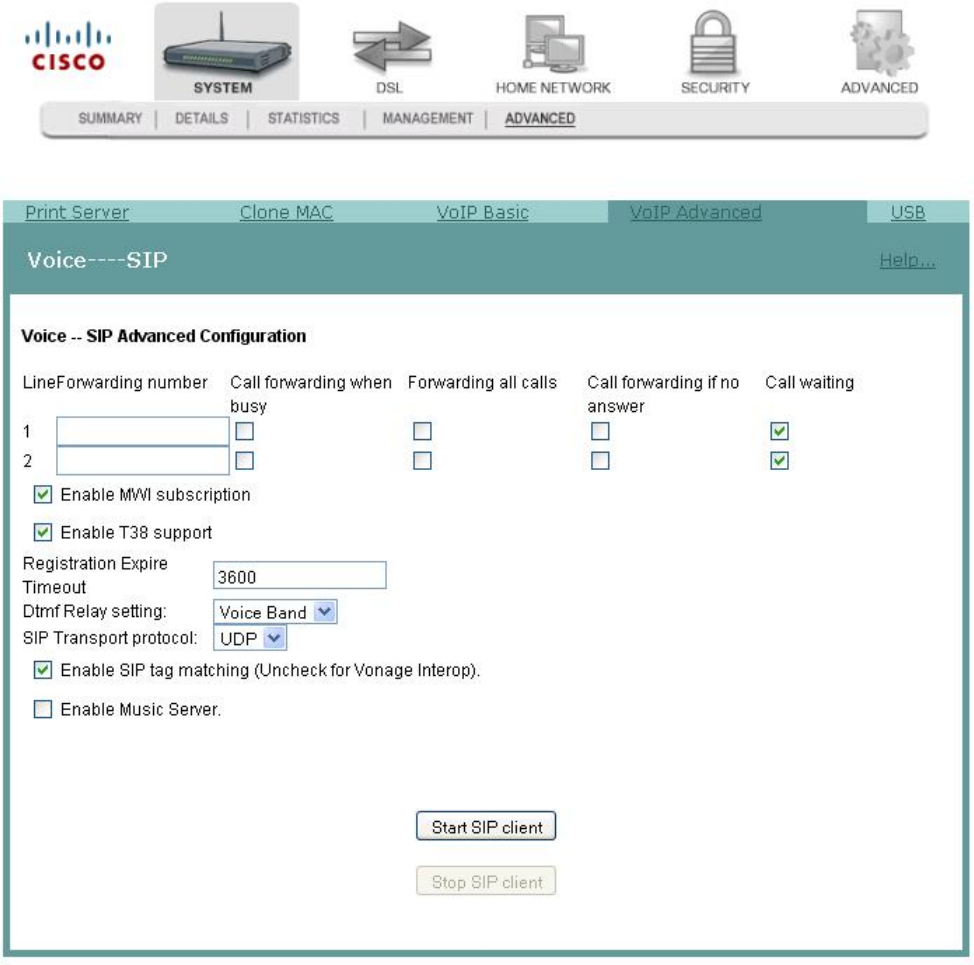
To set up the advanced VoIP features, complete the following steps.

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

2 Click **Advanced**. The Print Server Settings screen opens with the Print Server tab in the forefront.



3 Click the **VoIP Advanced** tab. The Voice ---- SIP screen opens.

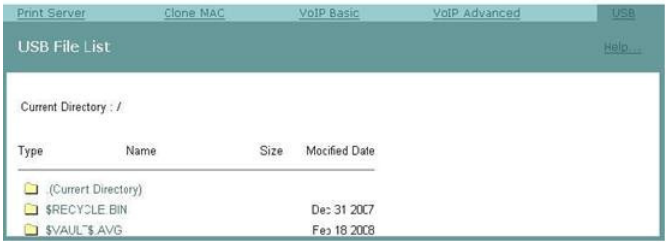


4. In the LineForwarding number field, enter the number to which you want to forward calls. Configure how calls are forwarded to this line using the following options:
   a. Check the Call forwarding when busy check box if you want to forward this line to another number when this line is busy.
   b. Check the Forwarding all calls check box if you want to forward all calls to this line.
   c. Check the Call forwarding if no answer check box if you want to forward this line if the caller receives no answer.
   d. Check the Call waiting check box if you want to enable call waiting for this line.
5. Repeat step 4 for a second phone line for which you wish to forward incoming calls.
6. Check the Enable MWI subscription check box if you want to enable the message waiting indicator.
7. Check the Enable T38 support check box if you want to enable T38 fax support.
8. In the Registration Expire Timeout field, enter the registration expiration time of the SIP client.
9. In the Dtmf Relay setting field, select one of the following settings:
   - Sip Info
   - RFC2833
   - Voice Band
10. In the SIP Transport protocol field, select the protocol you will support from the following options:
    - All
    - TCP
    - UDP
    - TLS
11. Check the Enable SIP tag matching (Uncheck for Vonage Interop) check box if you want to enable session initiation protocol.
12. Check the Enable Music Server check box if you want to have music playing while callers wait.
13. Click Start SIP client or click Stop SIP client if you want to start or stop the SIP client.

USB File List

The USB File List screen allows you to view and download the content of a USB flash drive from any computer connected to the gateway. This feature allows your residential gateway to act like a shared network drive.

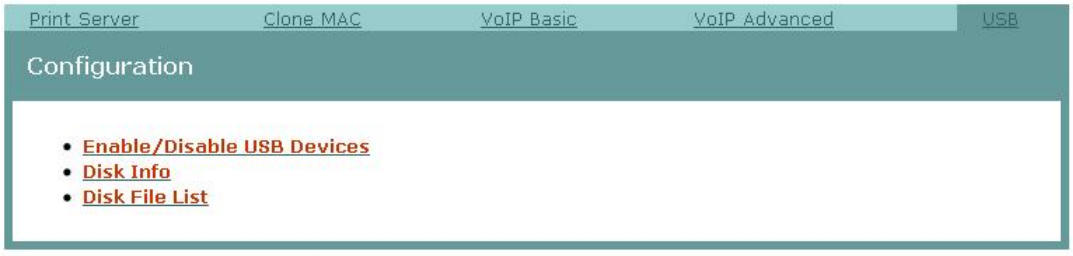
Path: System > Advanced > USB



Enabling or Disabling USB Devices

To enable or disable a USB device, complete the following steps.

1. Click **System** on the main screen.
2. Click **Advanced**. The Print Server Settings screen opens with the Print Server tab in the forefront.
3. Click **USB**. The USB Configuration screen opens.



4 Click **Enable/Disable USB Devices**. The Enable/Disable USB Devices screen opens.

5 Do you wish to enable USB devices?

- If **yes**, check the **Enable on-board usb storage devices** check box to enable the USB devices. After you enable it, you can view the USB disk information or the Disk File List on the page. You can access the files on the USB disk drive from any LAN/WLAN PC since the files are on the network.
- If **no**, make sure the **Enable on-board usb storage devices** check box is unchecked.

6 Click **Save/Apply** to save your settings.

4

DSL Configuration

The DSL tab allows you to check the status of the DSL connection and to modify the configuration.

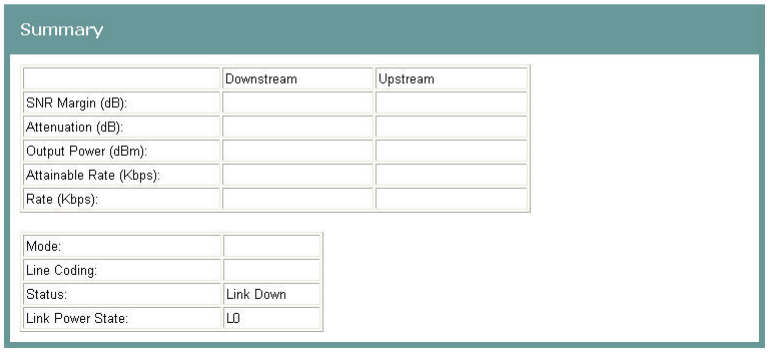
Use this chapter to help you check the status of the DSL connection, such as performance, and to modify the DSL configuration.

In This Chapter

DSL Summary

The DSL Summary screen shows the DSL performance and operational configuration of the DSL interface, such as signal to noise ratio and output power and line coding. The DSL chip on the residential gateway automatically detects the best method to use to communicate with the DSL access multiplexer (DSLAM). This screen reports the results of that process.

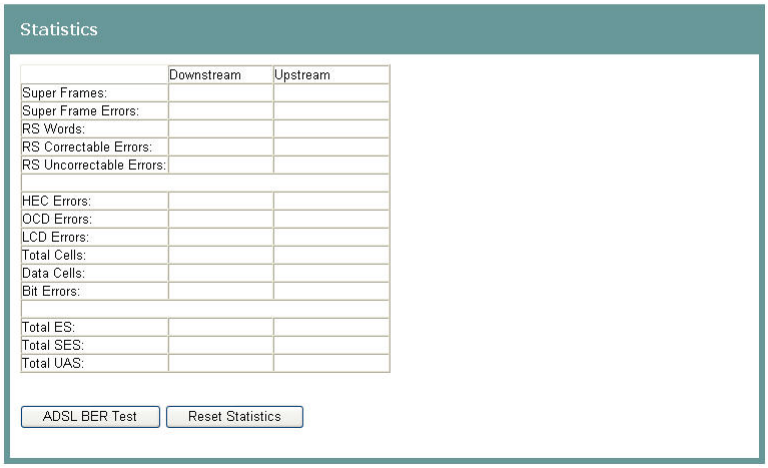
Path: DSL > Summary



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 errors and number of cells.

Path: DSL > Statistics

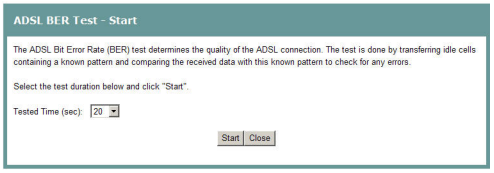


Testing the Quality of the DSL Connection

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.

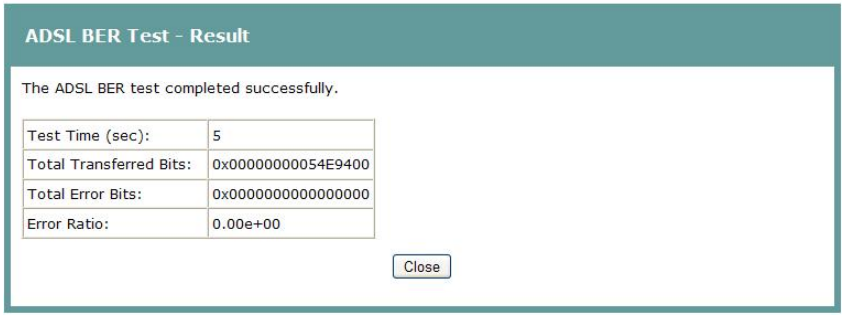
To test for quality of the DSL connection, complete the following steps.

1. Click **DSL** on the main screen.
2. Click the **Statistics** tab. The Statistics screen opens.
3. Click **ADSL BER Test**. The ADSL BER Test - Start screen opens.



4. 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.

5 Click **Start** on the ADSL BER Test - Start screen to start the test. The result of the ADSL BER Test appears as shown in the following example.



6 Click **Close** to close the popup window and return to the DSL Statistics page

Reset Statistics

To reset the statistics, complete the following steps.

1 Click **DSL** on the main screen.

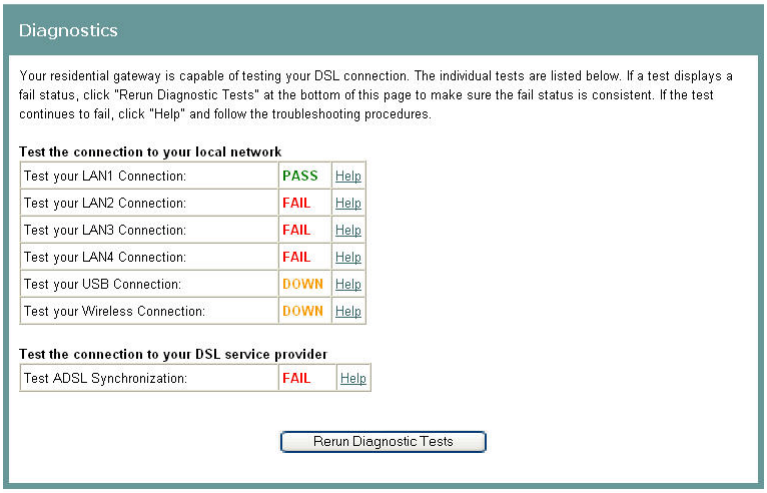
2 Click the **Statistics** tab. The Statistics screen opens.

3 Click **Reset Statistics** on the Statistics 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 while testing your DSL connection. The individual tests are listed on the Diagnostics screen.

Path: DSL > Diagnostics

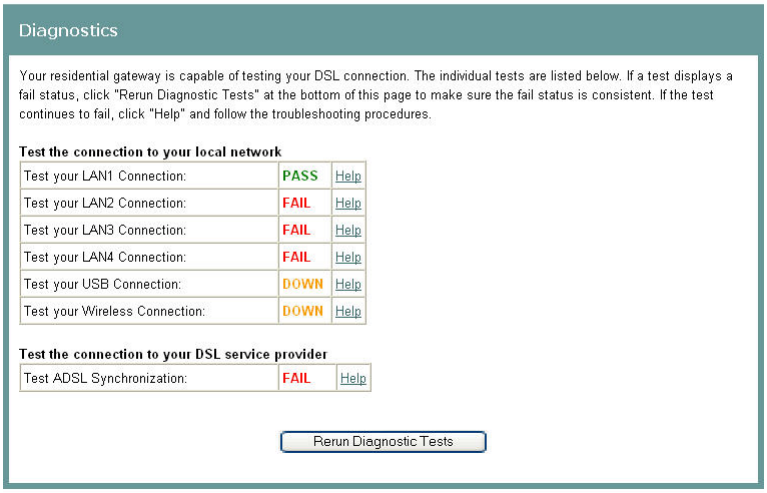


Running Diagnostic Tests

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 Click **Rerun Diagnostic Tests** to start the diagnostics test. The screen populates with results such as Fail or Pass.

4 When you have a Permanent Virtual Circuit (PVC) up, for example an MER connection as shown in the screen-shot below, then you can see a list of other tests such as OAM F4/F5 or the PING test appear on the DSL Diagnostics page. You can click **Test with OAM F4** to run a OAM F4 test.

mer_0_0_35 Diagnostics Help...

Test the connection to your local network

Test your LAN1 Connection:	PASS	Help
Test your LAN2 Connection:	PASS	Help
Test your LAN3 Connection:	FAIL	Help
Test your LAN4 Connection:	FAIL	Help
Test your USB Connection:	DOWN	Help
Test your Wireless Connection:	PASS	Help

Test the connection to your DSL service provider

Test ADSL Synchronization:	PASS	Help
Test ATM OAM F5 segment ping:	FAIL	Help
Test ATM OAM F5 end-to-end ping:	FAIL	Help

Test the connection to your Internet service provider

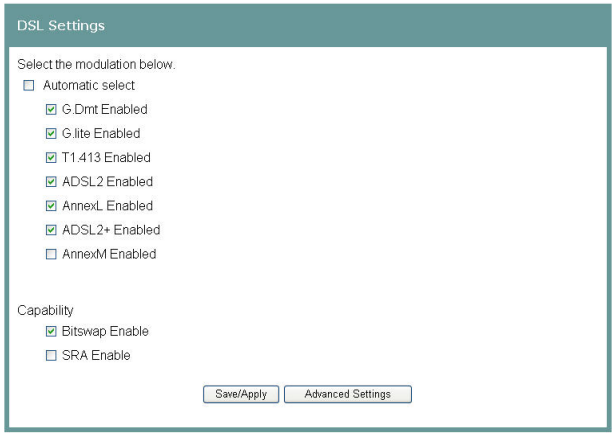
Ping default gateway:	PASS	Help
Ping primary Domain Name Server:	PASS	Help

Test | Test With OAM F4

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), Bitswap Enable, and so forth.

Path: DSL > Setting

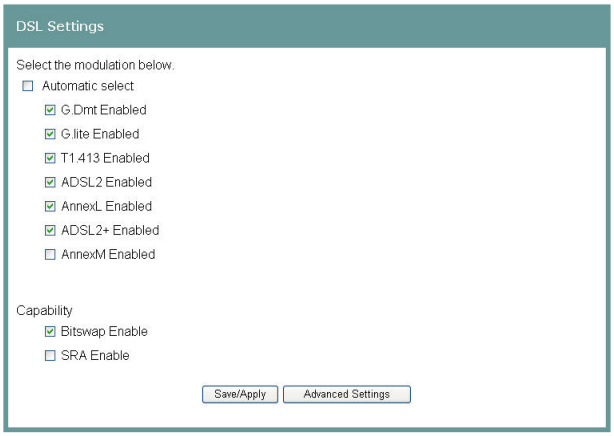


Configuring DSL Settings

To configure the DSL settings for the residential gateway, complete the following steps.

1 Click **DSL** on the main screen. The Summary screen opens by default.

2 Click the **Setting** tab. The DSL Settings screen opens.



3 Do you want to automatically select the modulation?

- If **yes**, make sure the **Automatic Select** check box is checked under Select the modulation below field. Go to step 5.
- If **no**, uncheck the **Automatic Select** check box. A list of modulation types appears.

4 Under the Select the modulation below area on the screen, select the modulation that you want to use. You can select one or all of the following modulations:

- G.Dmt Enabled
- G.lite Enabled
- T1.413 Enabled
- ADSL2 Enabled
- AnnexL Enabled
- ADSL2+ Enabled
- AnnexM Enabled

5 Under the Capability field, select the capability that you want to use from the following options:

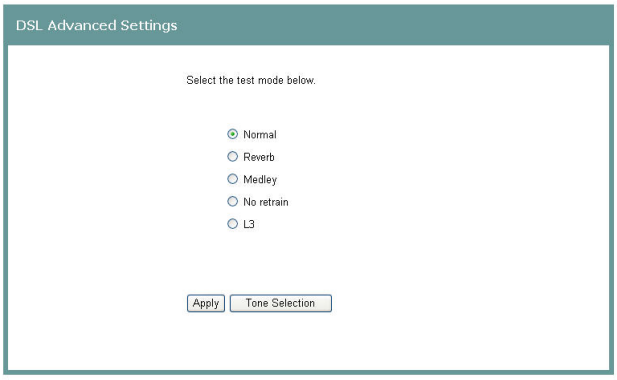
- Bitswap Enable
- SRA Enable

6 Click **Save/Apply** to save the settings.

DSL Advanced Settings

The DSL Advanced Settings screen allows you to select a test mode.

Path: DSL > Setting > Advanced Settings

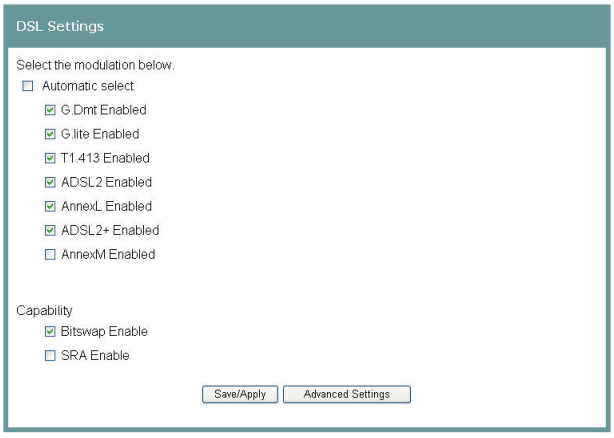


Configuring DSL Advanced Settings

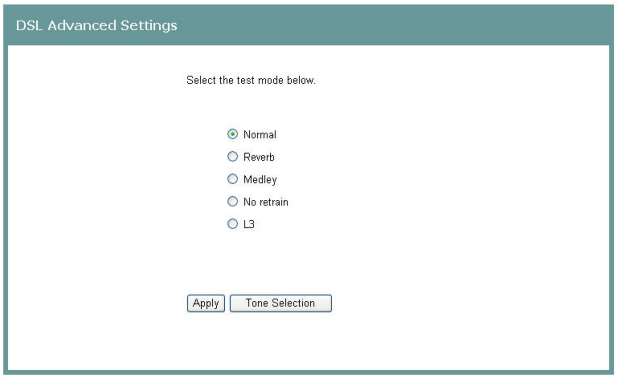
To configure the DSL advanced settings, complete the following steps.

1 Click **DSL** on the main screen. The Summary screen opens by default.

2 Click the **Setting** tab. The DSL Settings screen opens.



3 Click **Advanced Settings**. The DSL Advanced Settings screen opens.



4 Select the test mode from the following options:

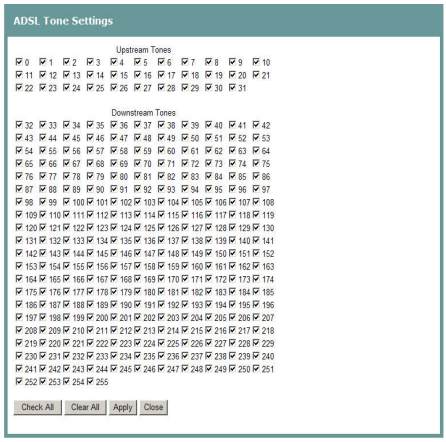
- Normal
- Reverb
- Medley
- No refrain
- L3

5 Click **Apply** to configure and save the advanced settings.

ADSL Tone Settings

The ADSL Tone Settings screen allows you to select active DSL tones or frequencies used by the DSL transceiver.

Path: DSL > Setting > Advanced Settings > Tone Selection

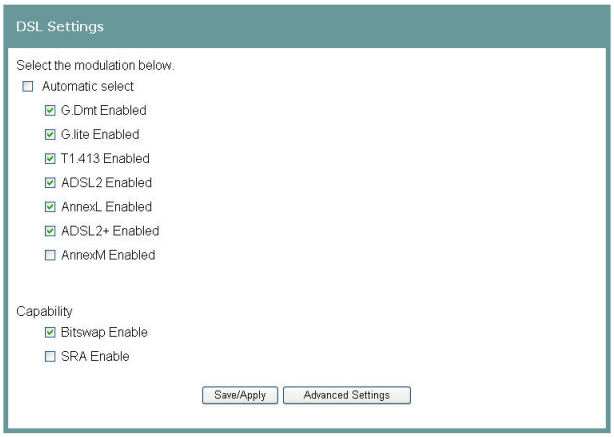


Setting DSL Tones or Frequencies

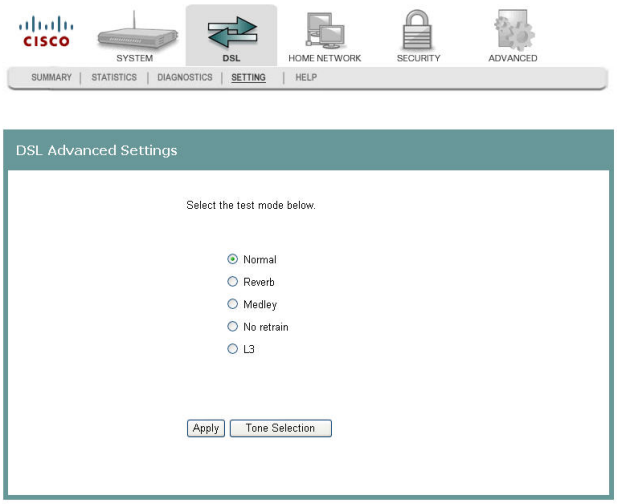
To set DSL tones or frequencies, complete the following steps.

1 Click **DSL** on the main screen. The Summary screen opens by default.

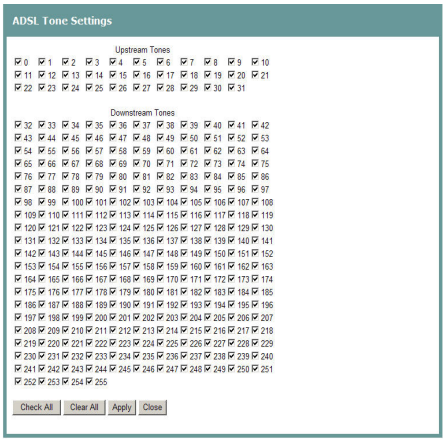
2 Click the **Setting** tab. The DSL Settings screen opens.



3 Click **Advanced Settings**. The DSL Advanced Settings screen opens.



4 Click **Tone Selection**. The ADSL Tone Settings screen opens.



5 Select the ADSL tone settings as follows.

- To select all the tones, click **Check All.**
- To select individual tones, click **Clear All** and then select the tones you want.

6 Click **Apply** to configure the tone settings.

7 Click **Close** to return to the DSL Advanced Settings screen.

5

Home Network Configuration

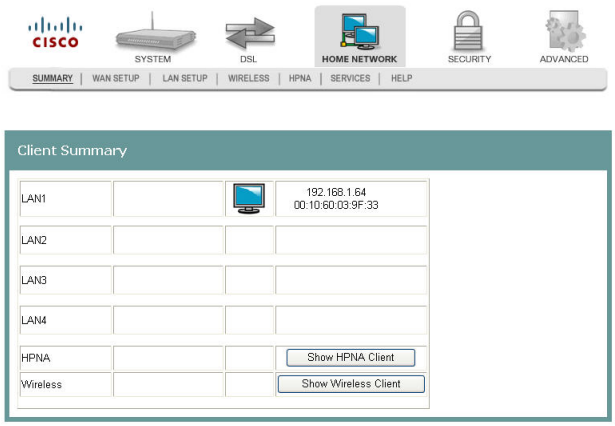
The Home Network tab allows you to check the home network configuration. You use this tab to configure and check the status of the devices connected to your home network.

In This Chapter

Client Summary

The Client Summary screen shows all the client devices (Wired/Wireless/HPNA) attached to the residential gateway on the LAN side. You can click **Show HPNA Client** to display the HPNA devices attached to the HPNA RF interface of the residential gateway.

Path: Home Network > Summary > Show HPNA Client



Updating HPNA Clients

To update the HPNA clients, complete the following steps.

1 Click **Home Network** on the main screen.

2 Click **Summary**. The Client Summary screen opens.