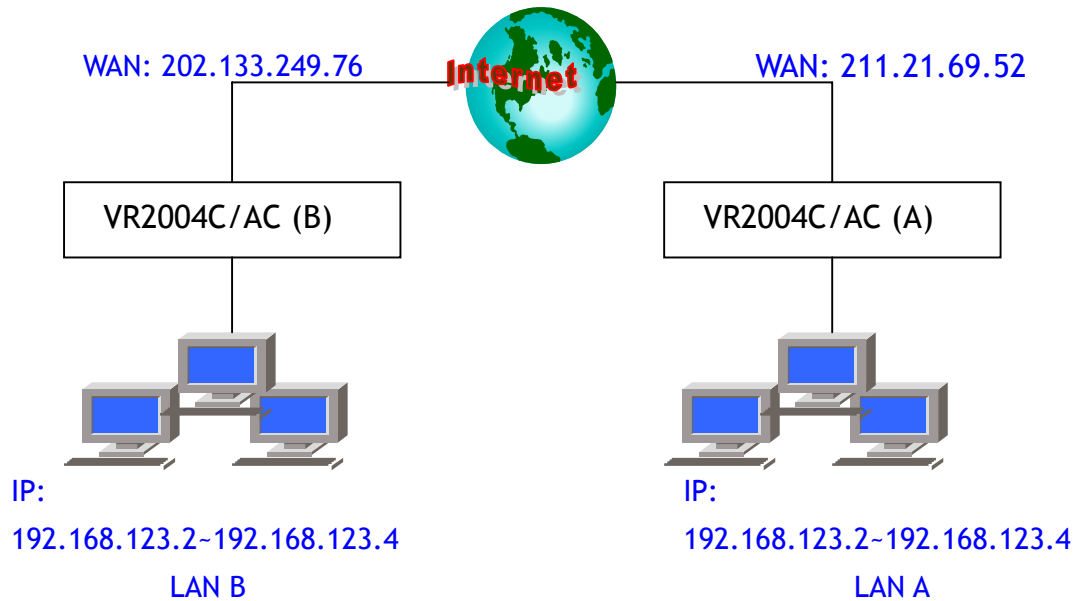




FriendlyNET[®] VR2004C/VR2004AC
Configuration Guide
LAN to LAN

LAN-to-LAN VPN setup between two VR2004C/ACs with fixed WAN configurations

The following steps will illustrate the way to set up a VPN connection between two LANs. The figure below demonstrates a VPN connection between two different LANs. In this example, LAN A has a static WAN IP address (from its ISP) of 211.21.69.52, and LAN B has a static WAN IP address (from its ISP) of 202.133.249.76.



Setting on Station A:

1. Go to the VR2004C/AC web page (<http://192.168.123.254>). Fill in the User Name as **admin**.

The screenshot shows a dialog box titled "Enter Network Password". It contains the following fields and options:

- Site: 192.168.123.254
- Realm: Login as admin
- User Name: admin
- Password: (empty field)
- Save this password in your password list
- Buttons: OK, Cancel

2. Click on **OK** to proceed to the main menu. Click on the **Setup Wizard**. Click on the **Device IP Settings** button.

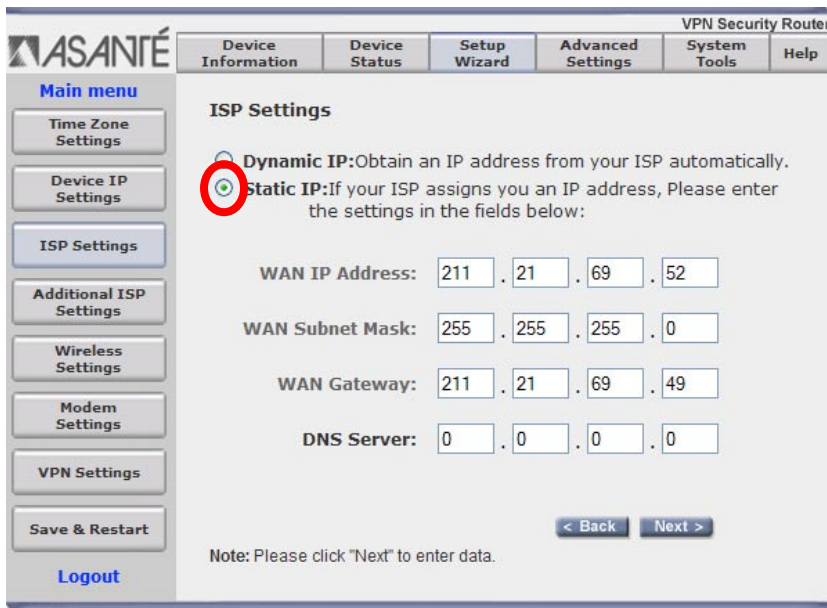
Fill in the following:

- IP Address: 192.168.123.254 (default)
- IP Subnet Mask: 255.255.255.0

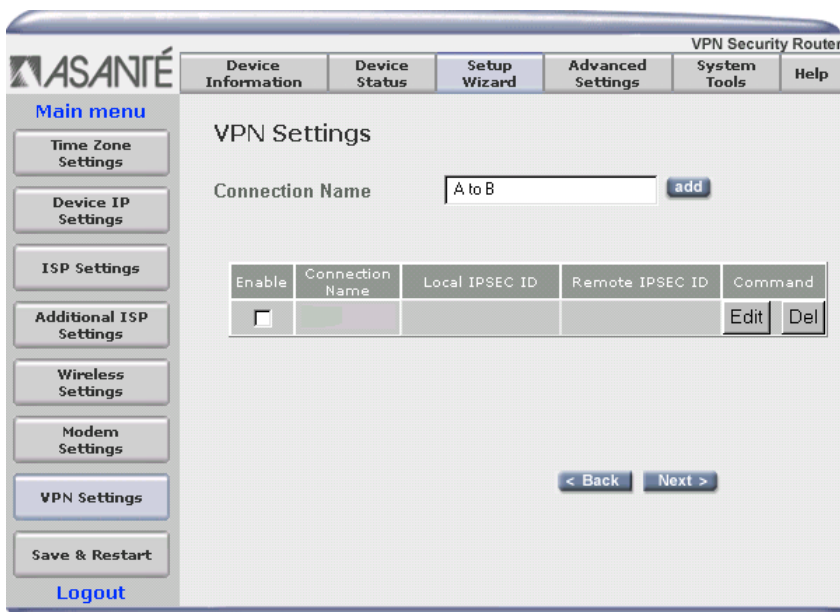
After filling in the LAN IP Address and the IP Subnet Mask, click on the **Next** button.

3. Click **ISP Settings**. If your ISP automatically assigns you a dynamic IP address, click the **Dynamic IP** radio button. If your ISP has assigned you a static (fixed) IP address, click the **Static IP** radio button, and enter the required values:

- WAN IP Address (assigned by your ISP). In this example, it is 211.21.69.52
- IP Subnet Mask: 255.255.255.0
- ISP Gateway Address (assigned by your ISP). In this example, it is 211.21.69.49



- Click **VPN Settings**. Create a name in the **Connection Name** field; e.g., A to B.



- Click **add**. On the screen that appears, enter the following values:

- Connection Name: A to B
- Local IPSEC Identifier: Allows you to identify multiple tunnels and does not have to match the name used at the other end of the tunnel. May be left blank. The default value is **Local**

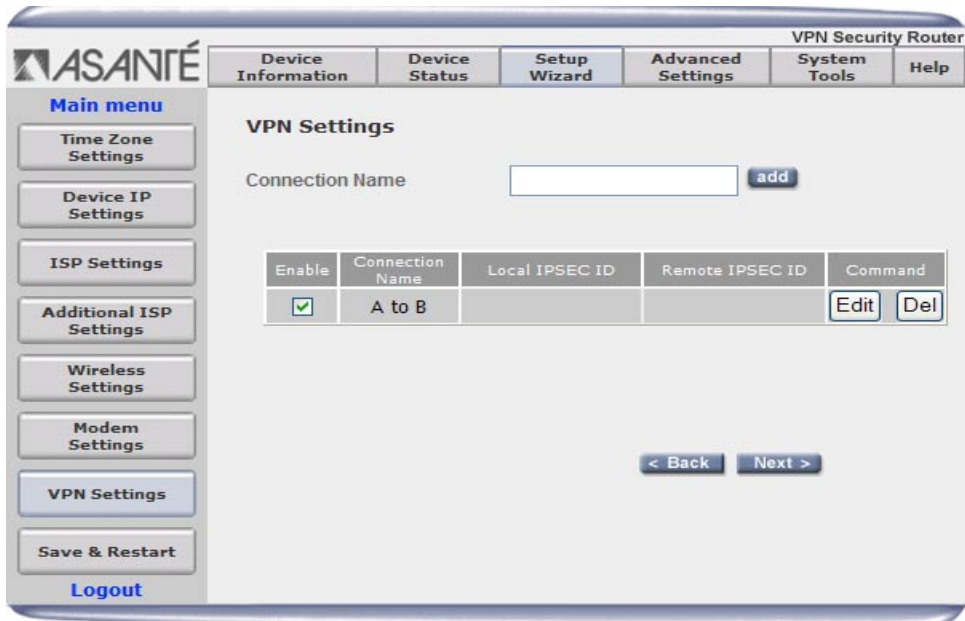
- Remote IPSEC Identifier: Allows you to identify multiple tunnels and does not have to match the name used at the other end of the tunnel. May be left blank. The default value is **Remote**
- Remote IP Network: 192.168.123.0
- Remote IP Net mask: 255.255.255.0
- Remote Gateway IP: 202.133.249.76
- PreShared Key: 12345678

The screenshot shows the configuration page for a VPN Security Router. The interface includes a navigation menu on the left with options like Time Zone Settings, Device IP SETTINGS, ISP Settings, Additional ISP Settings, Wireless Settings, Modem Settings, VPN Settings (selected), and Save & Restart. The main content area is titled 'VPN Settings' and contains the following fields:

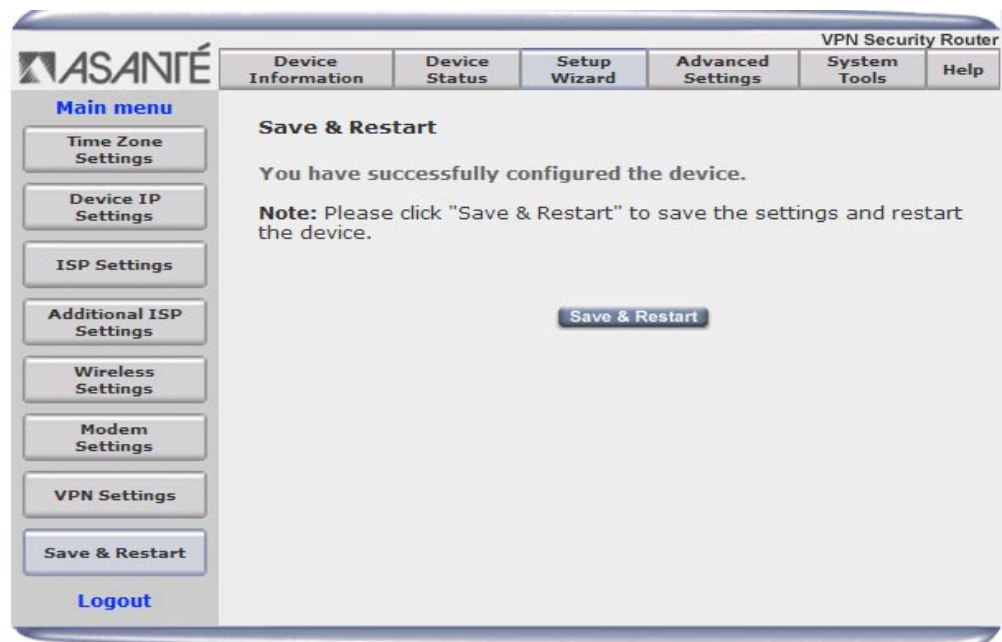
- Connection Name: A to B
- Local IPSEC Identifier: (empty)
- Remote IPSEC Identifier: (empty)
- Remote IP Network: 192.168.123.0
- Remote IP Netmask: 255.255.255.0
- Remote Gateway IP: 202.133.249.76
- Network Interface: WAN ETHERNET
- Secure Association: IKE Manual
- Perfect Forward Secure: Enabled Disabled
- Encryption Protocol: 3DES
- PreShared Key: 12345678
- Key Life: 3600 Seconds
- IKE Life Time: 28800 Seconds

A 'Save' button is located at the bottom right of the configuration area. Below the configuration fields is a table with columns for Enable, Connection Name, Local IPSEC ID, Remote IPSEC ID, and Command. The 'Enable' column has a checkbox that is currently unchecked. There are 'Edit' and 'Del' buttons for each row in the table. At the bottom of the page, there are '< Back' and 'Next >' navigation buttons.

6. Click the **Save** button. The screen will now show the following:



7. Click **Next**. This accesses the *Save & Restart* page.

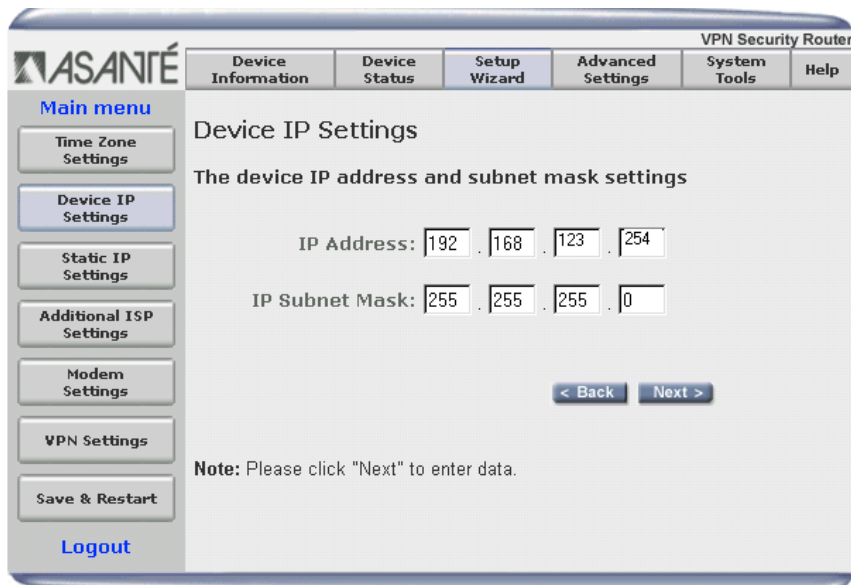


8. Click the **Save & Restart** button to save the router’s configuration for Station A. When the router’s LED lights stop flashing and the Main Menu appears, the router is ready for use.

Setting on Station B:

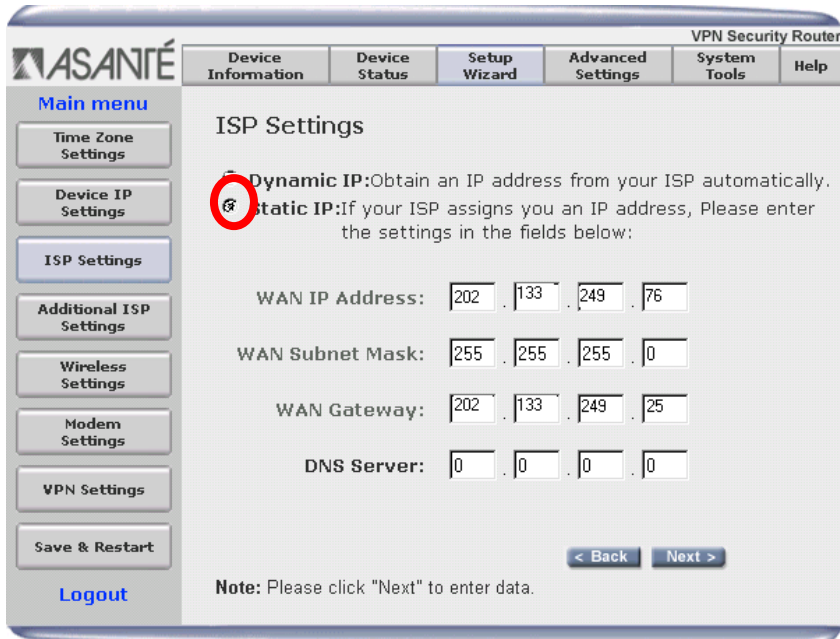
1. Click **Setup Wizard** and go to the **Device IP Settings** page. Enter the following values:

- IP address: 192.168.123.254
- IP Subnet Mask: 255.255.255.0

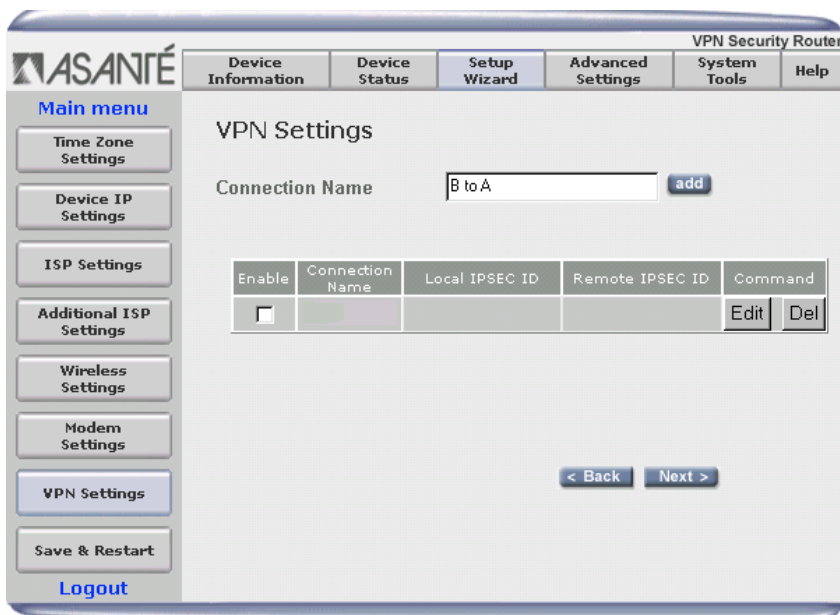


2. Click **Next**.
3. Click **ISP Settings**. If your ISP automatically assigns you a dynamic IP address, click the **Dynamic IP** radio button. If your ISP has assigned you a static (fixed) IP address, click the **Static IP** radio button, and enter the required values:

- WAN IP Address (assigned by your ISP). In this example, it is 202.133.249.76
- IP Subnet Mask: 255.255.255.0
- WAN Gateway IP Address (assigned by your ISP). In this example, it is 202.133.249.25



- Click **Next**.
- Click **VPN Settings**. Create a name in the **Connection Name** field; e.g., B to A.



- Click **add**. Enter the following values in the screen that appears:

- Connection Name: B to A
- Local IPSEC Identifier: Allows you to identify multiple tunnels and does not have to match the name used at the other end of the tunnel. May

be left blank. The default value is **Local**

- Remote IPSEC Identifier: Allows you to identify multiple tunnels and does not have to match the name used at the other end of the tunnel. May be left blank. The default value is **Remote**
- Remote IP Network: 192.168.123.0
- Remote IP Netmask: 255.255.255.0
- Remote Gateway IP: 211.21.69.52
- PreShared Key: 12345678

The screenshot shows the ASANTÉ VPN Security Router configuration interface. The top navigation bar includes tabs for Device Information, Device Status, Setup Wizard (selected), Advanced Settings, System Tools, and Help. The left sidebar contains a Main menu with buttons for Time Zone Settings, Device IP SETTINGS, ISP Settings, Additional ISP Settings, Wireless Settings, Modem Settings, VPN Settings (highlighted), Save & Restart, and Logout. The main content area is titled 'VPN Settings' and contains the following fields:

- Connection Name: B to A
- Local IPSEC Identifier: (empty)
- Remote IPSEC Identifier: (empty)
- Remote IP Network: 192.168.123.0
- Remote IP Netmask: 255.255.255.0
- Remote Gateway IP: 211.21.69.52
- Network Interface: WAN ETHERNET (dropdown)
- Secure Association: IKE Manual
- Perfect Forward Secure: Enabled Disabled
- Encryption Protocol: 3DES (dropdown)
- PreShared Key: 12345678
- Key Life: 3600 Seconds
- IKE Life Time: 28800 Seconds

A 'Save' button is located to the right of the IKE Life Time field. Below the settings is a table with the following structure:

Enable	Connection Name	Local IPSEC ID	Remote IPSEC ID	Command
<input type="checkbox"/>				Edit Del

At the bottom of the page are '< Back' and 'Next >' navigation buttons.

7. Click **Save**. The newly created connection will appear in the table. Click **Next**.
8. Click **Save & Restart** and wait until the router finishes its restart process and the Main Menu appears.

9. Back on Router A, click **Device Status**.

ASANTÉ VPN Security Router

Device Information | **Device Status** | Setup Wizard | Advanced Settings | System Tools | Help

Main menu

WAN Status:
 Cable/DSL: Active
 Connect by PPPoE
 WAN IP:
 Netmask:255.255.255.0
 DNS:

[Release](#)
[Renew](#)

Modem Backup:
 Modem: Not Active

Device IP:
 IP:192.168.123.254
 LAN
 MAC:00:03:0A:00:2F:6D
 WAN
 MAC:00:03:0A:00:2F:6E

VPN Status (circled in red)
[DHCP Status](#)

[Logout](#)

Device Status

Modem Backup | Cable/DSL Modem | LAN | Wireless

DHCP Log

LAN IP: 192.168.123.168	MAC: 00:00:94:CC:28:B0
LAN IP: 192.168.123.3	MAC: 00:00:94:CC:29:2C
LAN IP: 192.168.123.4	MAC: 00:00:94:CC:28:B0

10. Click **VPN Status**. View the VPN Connection Status, as shown below:

VPN Status - Microsoft Internet Explorer

VPN Connection Status

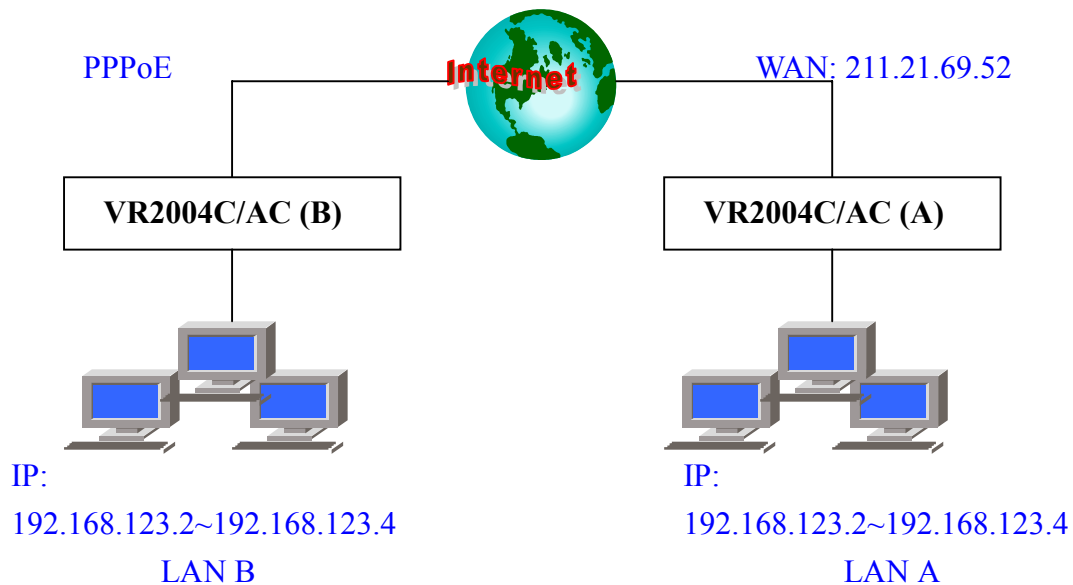
IPSec Connection Status

Status	Connection Name	Remote IP	Virtual Network	Interface	Type	State	Tx Pkts	Rx Pkts	Up Time	Drop
Active	A to B	202.133.249.76	192.168.123.0/24	WAN Ethernet		Idle	17	17	00:02:21	Drop

LAN-to-LAN setup between two VR2004 VPN routers; one LAN uses a fixed address, and the other uses a dynamic WAN IP address

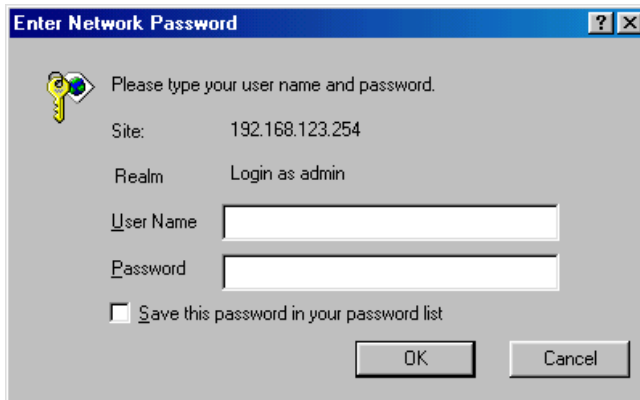
The following steps will illustrate the way to set up a VPN connection between two LANs. The figure below shows an example VPN connection between two different LANs (LAN A & LAN B).

- LAN A uses a static WAN IP address to connect to the Internet (211.21.69.52)
- LAN B uses Point-to-Point Protocol over Ethernet (PPPoE) to connect to the Internet

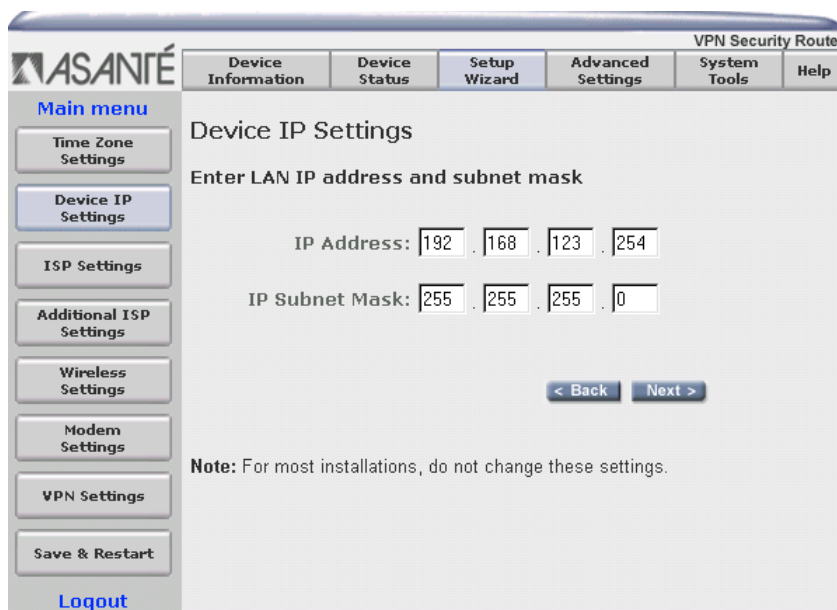


Setting on LAN A:

1. Go to the VR2004C/AC web page (<http://192.168.123.254>). Fill in the User Name as **admin**. By default, there is no password.



2. Click **OK** to proceed to the Main Menu. From the Main Menu, click on **Setup Wizard**. Click on **Device IP Settings**.



Fill in the following:

- IP Address: 192.168.123.254
 - IP Subnet Mask: 255.255.255.0
3. After entering the LAN IP address and IP subnet mask, click on the **Next** button.

4. Click **ISP Settings**. In this example, the ISP assigns a static (fixed) address. Therefore, click the **Static IP** radio button and enter the required values:

- WAN IP address (assigned by your ISP). In this example, it is 211.21.69.52
- IP subnet mask: 255.255.255.0
- ISP gateway address (assigned by your ISP). In this example, it is 211.21.69.49

VPN Security Router

Device Information | Device Status | **Setup Wizard** | Advanced Settings | System Tools | Help

Main menu

Time Zone Settings

Device IP Settings

ISP Settings

Additional ISP Settings

Wireless Settings

Modem Settings

VPN Settings

Save & Restart

Logout

ISP Settings

Dynamic IP: Obtain an IP address from your ISP automatically.

Static IP: If your ISP assigns you an IP address, Please enter the settings in the fields below:

WAN IP Address: 211 . 21 . 69 . 52

WAN Subnet Mask: 255 . 255 . 255 . 0

WAN Gateway: 211 . 21 . 69 . 49

DNS Server: 0 . 0 . 0 . 0

< Back Next >

Note: Please click "Next" to enter data.

5. Click **VPN Settings**. Create a name in the **Connection Name** field; e.g., A to B.

VPN Security Router

Device Information | Device Status | **Setup Wizard** | Advanced Settings | System Tools | Help

Main menu

Time Zone Settings

Device IP Settings

ISP Settings

Additional ISP Settings

Wireless Settings

Modem Settings

VPN Settings

Save & Restart

Logout

VPN Settings

Connection Name: A to B

Enable	Connection Name	Local IPSEC ID	Remote IPSEC ID	Command
<input type="checkbox"/>				<input type="button" value="Edit"/> <input type="button" value="Del"/>

< Back Next >

6. Click **add**. In the screen that appears, enter the following values:

- Connection Name: A to B
- Local IPSEC Identifier: Allows you to identify multiple tunnels and does not have to match the name used at the other end of the tunnel. May be left blank. The default value is **Local**
- Remote IPSEC Identifier: Allows you to identify multiple tunnels and does not have to match the name used at the other end of the tunnel. May be left blank. The default value is **Remote**
- Remote IP Network: 192.168.123.0
- Remote IP Netmask: 255.255.255.0
- Remote Gateway IP: 0.0.0.0
- PreShared Key: 12345678

The screenshot shows the ASANTÉ VPN Security Router configuration interface. The main menu on the left includes options like Time Zone Settings, Device IP SETTINGS, ISP Settings, Additional ISP Settings, Wireless Settings, Modem Settings, VPN Settings (highlighted), and Save & Restart. The VPN Settings page is titled "VPN Settings" and contains the following fields and options:

- Connection Name: A to B
- Local IPSEC Identifier: (empty)
- Remote IPSEC Identifier: (empty)
- Remote IP Network: 192.168.123.0
- Remote IP Netmask: 255.255.255.0
- Remote Gateway IP: 0.0.0.0
- Network Interface: WAN ETHERNET
- Secure Association: IKE Manual
- Perfect Forward Secure: Enabled Disabled
- Encryption Protocol: 3DES
- PreShared Key: 12345678
- Key Life: 3600 Seconds
- IKE Life Time: 28800 Seconds

A "Save" button is located at the bottom right of the settings area. Below the settings is a table with columns: Enable, Connection Name, Local IPSEC ID, Remote IPSEC ID, and Command. The table is currently empty. At the bottom of the page are "< Back" and "Next >" buttons.

7. Click the **Save** button. The screen will now show the following:



8. Click **Next**. This accesses the *Save & Restart* page.



9. Click the **Save & Restart** button to save the router's configuration for LAN A.

Setting on LAN B:

1. Click **Setup Wizard** and go to the **Device IP Settings** page. Enter the following values:

- IP address: 192.168.123.254
- IP Subnet Mask: 255.255.255.0

ASANTÉ VPN Security Router

Device Information Device Status **Setup Wizard** Advanced Settings System Tools Help

Main menu

Time Zone Settings

Device IP Settings

ISP Settings

Additional ISP Settings

Wireless Settings

Modem Settings

VPN Settings

Save & Restart

Logout

Device IP Settings

Enter LAN IP address and subnet mask

IP Address: 192 . 168 . 123 . 254

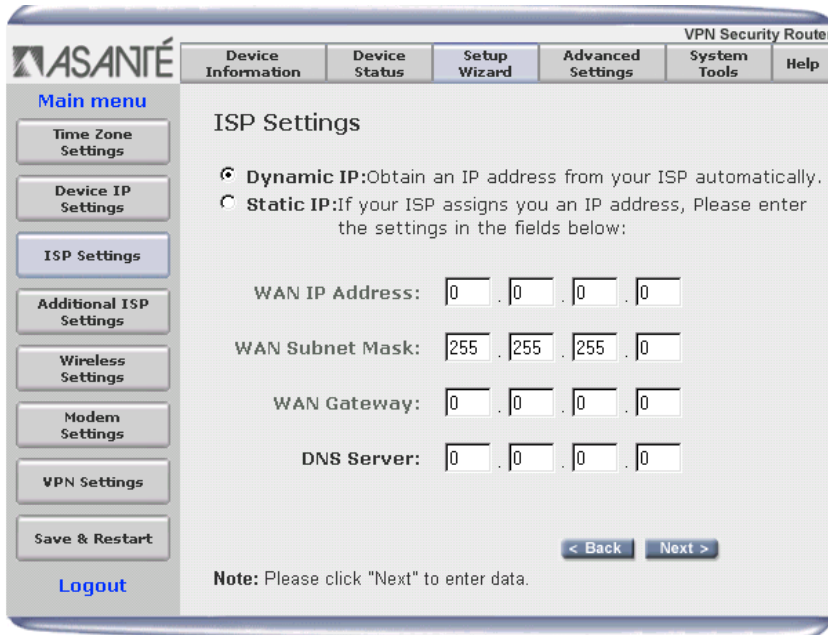
IP Subnet Mask: 255 . 255 . 255 . 0

< Back Next >

Note: For most installations, do not change these settings.

2. Click **Next**.

3. Click **ISP Settings**. Click the **Dynamic IP** radio button.



ASANTÉ VPN Security Router

Device Information Device Status **Setup Wizard** Advanced Settings System Tools Help

Main menu

Time Zone Settings

Device IP Settings

ISP Settings

Additional ISP Settings

Wireless Settings

Modem Settings

VPN Settings

Save & Restart

Logout

ISP Settings

Dynamic IP: Obtain an IP address from your ISP automatically.

Static IP: If your ISP assigns you an IP address, Please enter the settings in the fields below:

WAN IP Address: [0].[0].[0].[0]

WAN Subnet Mask: [255].[255].[255].[0]

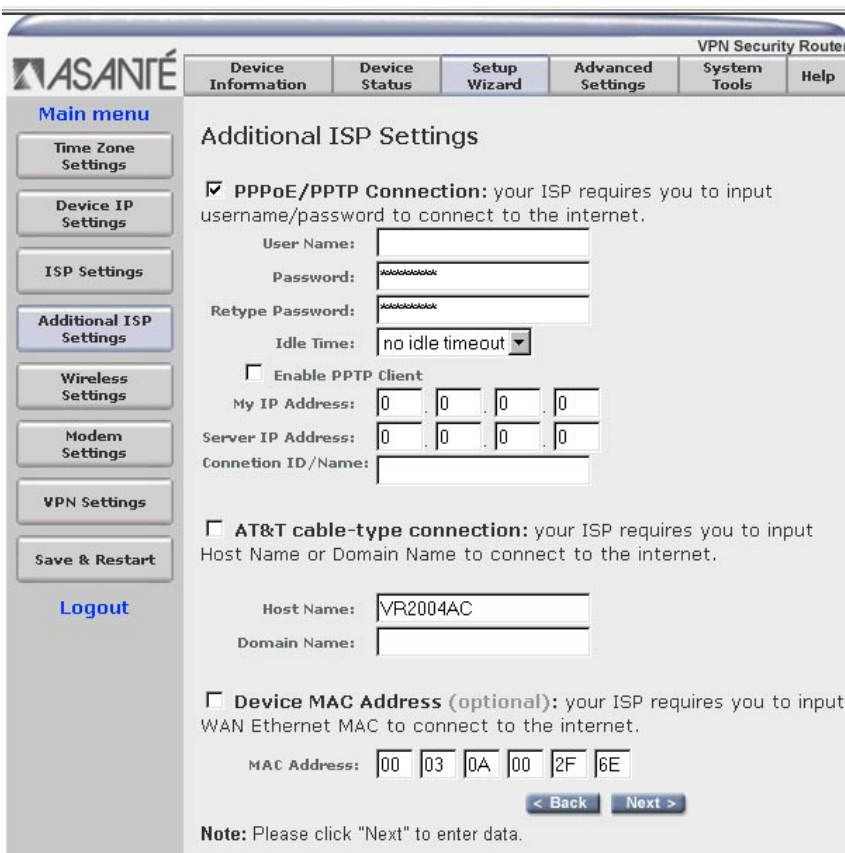
WAN Gateway: [0].[0].[0].[0]

DNS Server: [0].[0].[0].[0]

< Back Next >

Note: Please click "Next" to enter data.

- Click **Next** to access the **Additional ISP Settings** page. Click the **PPPoE/PPTP Connection** radio button. Enter the user name and password, making sure to re-enter the password for confirmation.



ASANTÉ VPN Security Router

Device Information Device Status Setup Wizard **Advanced Settings** System Tools Help

Main menu

Time Zone Settings

Device IP Settings

ISP Settings

Additional ISP Settings

Wireless Settings

Modem Settings

VPN Settings

Save & Restart

Logout

Additional ISP Settings

PPPoE/PPTP Connection: your ISP requires you to input username/password to connect to the internet.

User Name: []

Password: []

Retype Password: []

Idle Time: no idle timeout

Enable PPTP Client

My IP Address: [0].[0].[0].[0]

Server IP Address: [0].[0].[0].[0]

Connection ID/Name: []

AT&T cable-type connection: your ISP requires you to input Host Name or Domain Name to connect to the internet.

Host Name: VR2004AC

Domain Name: []

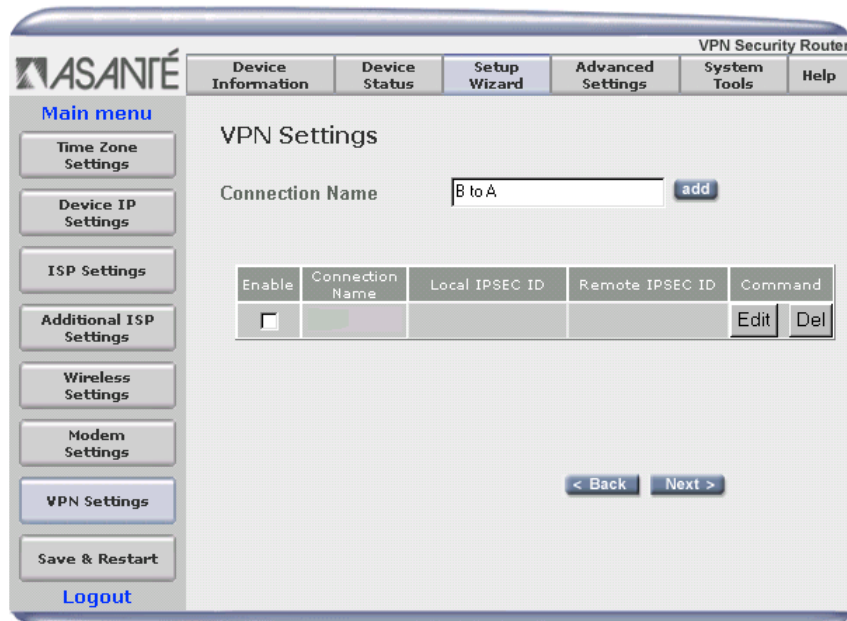
Device MAC Address (optional): your ISP requires you to input WAN Ethernet MAC to connect to the internet.

MAC Address: [00].[03].[0A].[00].[2F].[6E]

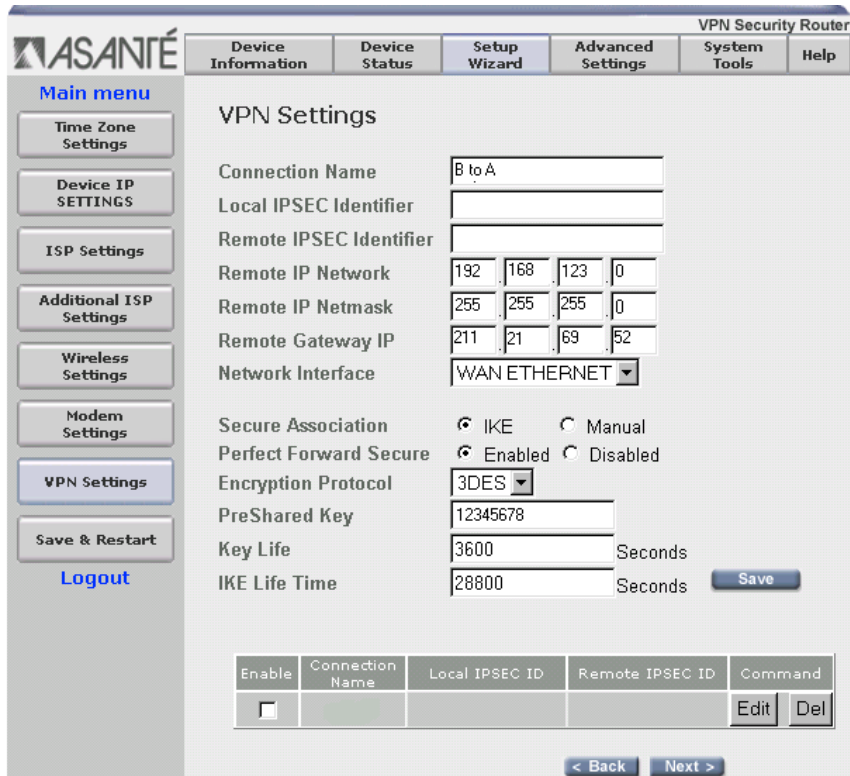
< Back Next >

Note: Please click "Next" to enter data.

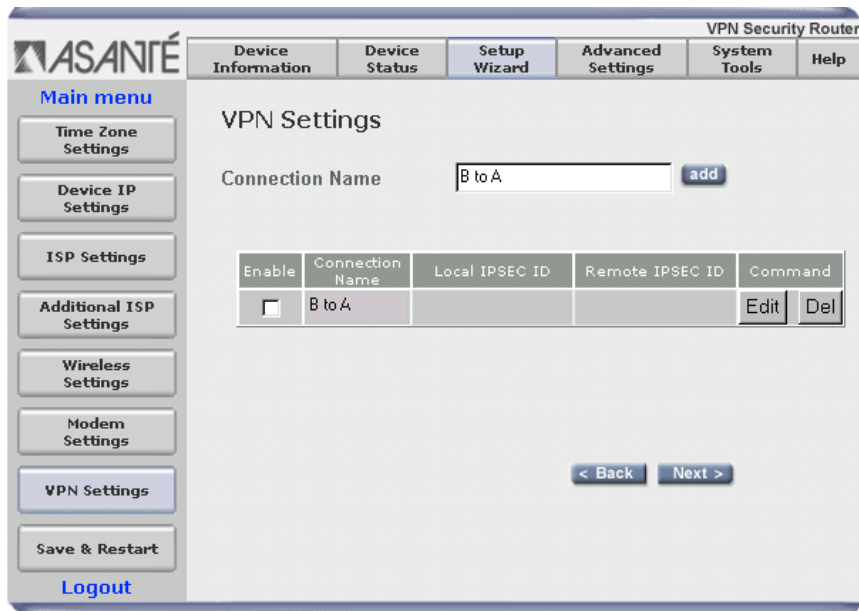
5. Click **Next**.
6. Click **VPN Settings**. Create a name in the **Connection Name** field; e.g.,
Connection Name: B to A.



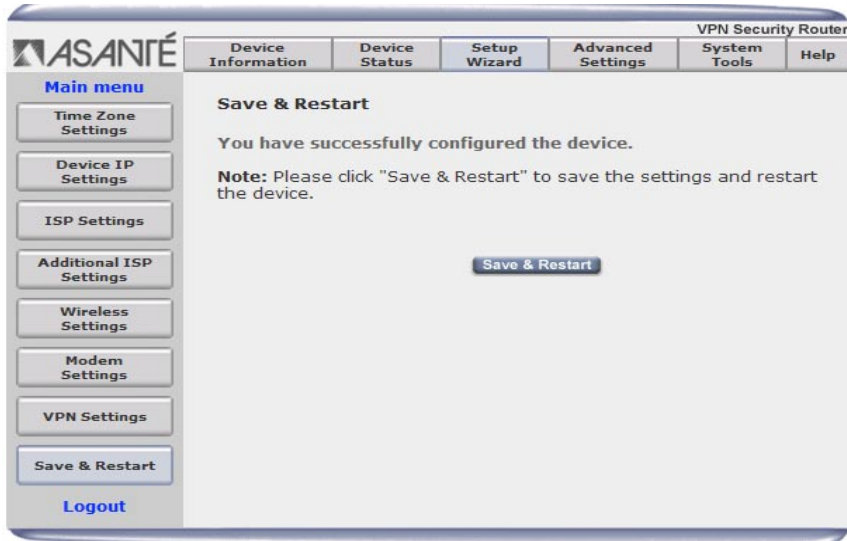
7. Click **add**. On the screen that appears, enter the following values:
 - Connection Name: B to A
 - Local IPSEC Identifier: Allows you to identify multiple tunnels and does not have to match the name used at the other end of the tunnel. May be left blank. The default value is **Local**
 - Remote IPSEC Identifier: Allows you to identify multiple tunnels and does not have to match the name used at the other end of the tunnel. May be left blank. The default value is **Remote**
 - Remote IP Network: 192.168.123.0
 - Remote IP Netmask: 255.255.255.0
 - Remote Gateway IP: 211.21.69.52
 - PreShared Key: 12345678



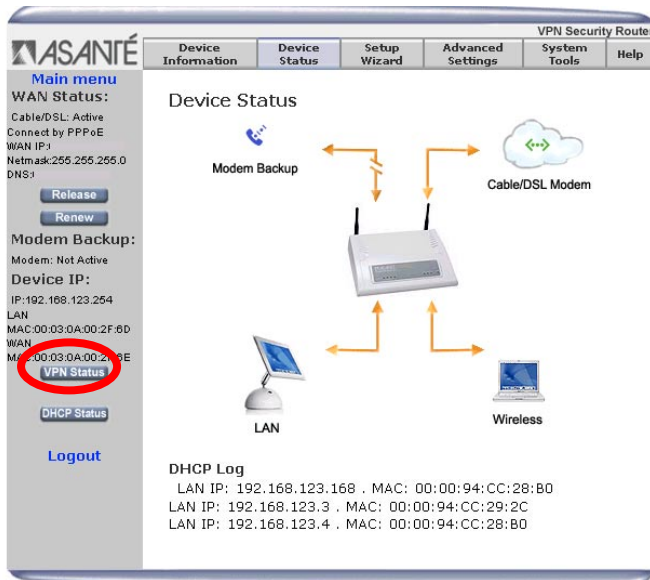
8. Click **Save**. The following screen will appear:



9. Click **Next**. This will access the *Save & Restart* page, as follows.



10. Click the **Save & Restart** button to save the configuration for LAN B.
11. Back in the router on LAN A, click **Device Status**.



12. Click **VPN Status**. The VPN Connection Status is shown:

VPN Connection Status

IPSec Connection Status

Status	Connection Name	Remote IP	Virtual Network	Interface	Type	State	Tx Pkts	Rx Pkts	UpTime	Drop
Active	A to B	0.0.0.0	192.168.123.0/24	WAN Ethernet		Idle	17	17	00:02:21	Drop



Asanté Technologies, Inc.
821 Fox Lane
San Jose, CA 95131
USA

SALES

800-662-9686 Home/Office Solutions
800-303-9121 Enterprise Solutions
408-435-8388

TECHNICAL SUPPORT

801-566-8991: Worldwide
www.asante.com/support

Copyright © 2003 Asanté Technologies, Inc. All rights reserved. No part of this document, or any associated artwork, product design, or design concept may be copied or reproduced in whole or in part by any means without the express written consent of Asanté Technologies, Inc. Asanté and FriendlyNET are registered trademarks and the Asanté logo and FriendlyCare are trademarks of Asanté Technologies, Inc. All other brand names or product names are trademarks or registered trademarks of their respective holders. All features and specifications are subject to change without prior notice.