

**LP-1521 Wideband Router 123 Manual L
VPN Configuration between two LP-1521`s with Dynamic IP.**

LP1521_M123_ENL02W



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two LP-1521`s with Dynamic IP.**



1

This 123 Manual only applies to configurations in mode: **Gateway**.

Considerations for the VPN configuration of the LP-1521.

- 1.1 Please take in mind that the Firewalls between connections must be configured correctly, this means that it must be disabled or the VPN ports must be open accordingly.
- 1.2 If the communication media is the Internet, there will be three scenarios:
 - A. Scenario 1: both ends have fixed IP's.
 - B. Scenario2: one fixed IP and a dynamic one.
 - C. Scenario3: two dynamic IP's.
- 1.3 **In case you have Dynamic IP's, you will previously configure an account with a DDNS service provider, please refer to document: 123 DDNS (Document: LP1521_M123_SPN01w.pdf) create the Aliases of the diagram, E.G: labazul.dyndns.org.**

2

In order to configure the VPN's, please first run the Firmware update 123 manual, (**Document: LP1521_M123_SPM01w.pdf**). Go to version: **1.4.7.cp.TPC.D_eng1** or superior. In order to know the actual versión of your LP-1521, enter in the configuration window of your equipment and select: **Status**, the actual version will appear at its right: **Firmware Versión** (See figure 1).

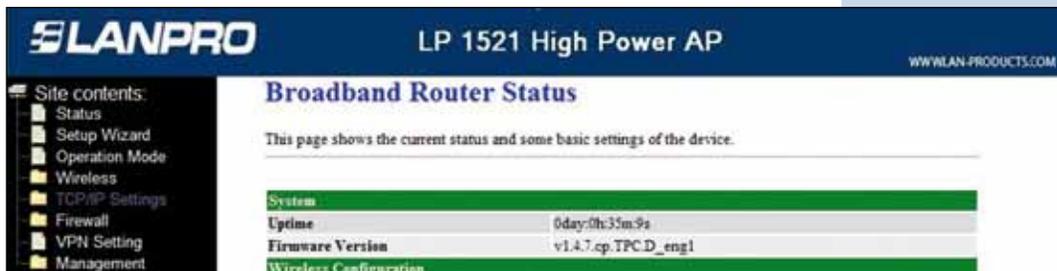


Figure 1

If you don't have the indicated version, follow the steps of your 123 firmware Update manual , document: **LP1521_M123_ENM01w.pdf**, in order to get option: **Remote Gateway Domain Name** in the VPN Option.

3

Later, in the window shown in figure 2, configure the equipment with the 123 manual for Installation in Mode: **Router y AP**, document: **LP1521_M123_SPG01w.pdf**, for each of the LP-1521 (please take in mind the diagram shown in figure 3 as example, input the corresponding IP address to the location in the network). If you don't want to have wireless clients in that location, you can deactivate them by using the equipment as routers only. In order to do this, please select option: **Wireless**, then **Basic Settings**, mark the field named: **Disable Wireless LAN Interface** and select: **Apply Changes**, remember that once this option has been selected, the wireless part will be disabled.



Figure 2

Now, prepare a connection diagram so you can look at the corresponding scenario. Please see figure 3 in which a general diagram for this 123 Manual show that the two end points have Dynamic IP's:

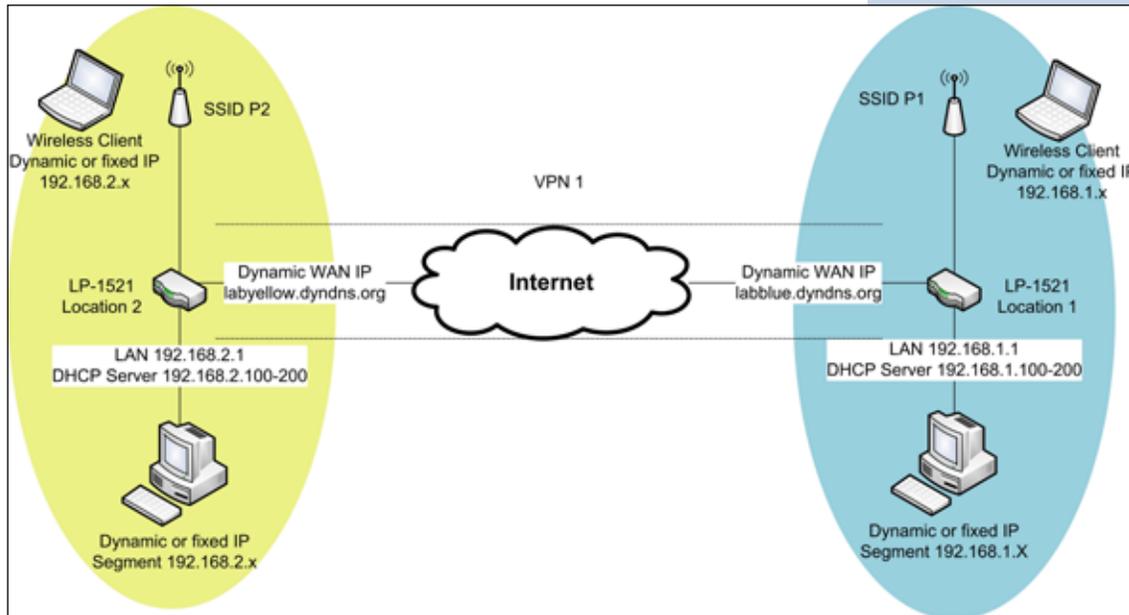


Figure 3

4

Now, let's configure the LP-1521 with the SSID 1 (Blue color, figure 3). Important: please take in mind the IP address of the LP-1521, it is: 192.168.1.1. From the blue colored network equipment open the browser and look for the following address: <http://192.168.1.1> as shown in figure 4. Input now your user and password in case you configured it in the AP Router 123 Manual.



Figure 4

5

In the window of figure 5, select option: **Management**, select then: **DDNS**, also: **Enable DDNS** and fill the following fields: **Service Provider**, there select: **Dyndns**, in: **domain Name**, input the alias created (in this example: **labazul.dyndns.org**), in: **User Name** input the user name and in: **Password** the password of the DDNS account, "these data were created in the 123 DDNS manual", then select: **Apply Change**.

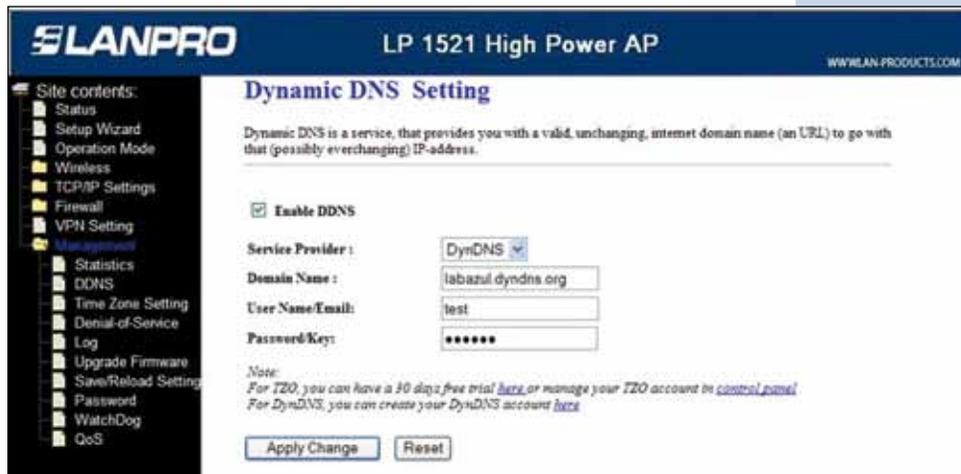


Figure 5

6

In the window shown in figure 6, select option: **VPN Setting** and enable the field: **Enable IPSEC VPN**, and then select: **Apply Changes**.



Figure 6

7

Once the change has been done, select: **OK**, as shown in figure 7.

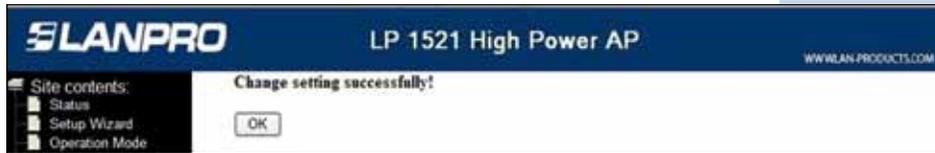


Figure 7

8

The first tunnel will be enable by default, as shown in figure 8. Select option: **Edit** if you wish to do editing.

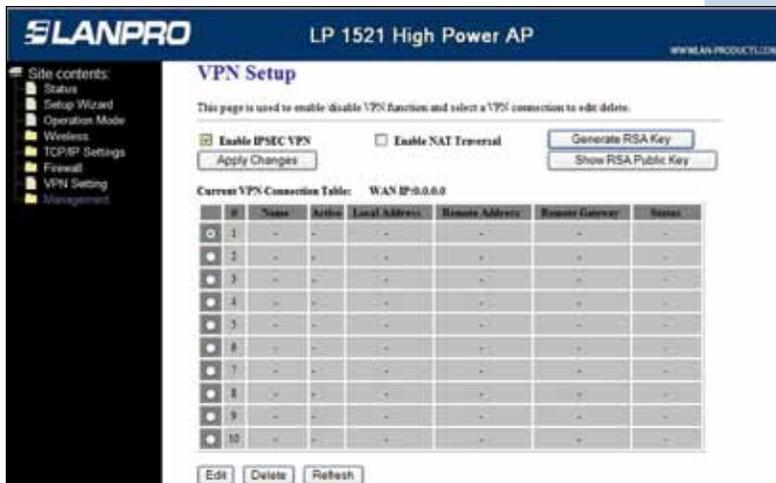


Figure 8

9

You can have several values for the VPN, in this example a typical configuration is shown, which you can adjust to your needs. Input the values as shown in figure 9 and then select: **Apply Changes**.

For the blue network segment LP-1521 values, please refer to the table shown in figure 18.





Key Management: IKE Manual

Connection Type: Initiator

ESP: 3DES (Encryption Algorithm)
MD5 (Authentication Algorithm)

PreShared Key: 1234567890

Remote RSA Key:

Status: **Disconnected**

Figure 9

10

Once the changes are applied, select: **Ok** as shown in figure 10.

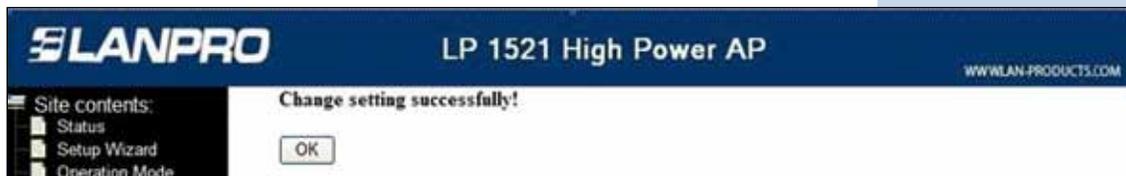


Figure 10

11

We will now configure the LP-1521 with the SSID 2 (Yellow color in figure 3).

Important, please take in mind that the IP Address of the LP-1521 is: 192.168.2.1. Please open the browser from the equipment that is in the blue colored network with the IP address shown. <http://192.168.2.1> as shown in figure 11. Please input the user and password if you configured it with the AP Router 123 Manual.



Figure 11

12

In the window of figure 12, select the option: **Management**, select also: **DDNS**, then select: **Enable DDNS** and fill-up the fields in: **service provider** select: **Dyndns**, in: **domain Name** input the alias created (In this example: labamarillo.dyndns.org), in: **User Name** input the user and in: **Password**, the password of the DDNS account, "These data were created in the 123 DDNS Manual", then select: **Apply Change**.



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Dynamic DNS Setting

Dynamic DNS is a service, that provides you with a valid, unchanging, internet domain name (an URL) to go with that (possibly) everchanging IP-address.

Enable DDNS

Service Provider: DynDNS

Domain Name: labamarillo.dyndns.org

User Name/Email:

Password/Key:

Note:
For ZDO, you can have a 30 days free trial [here](#) or manage your ZDO account in [control panel](#).
For DynDNS, you can create your DynDNS account [here](#).

Figure 12

13

In the window of figure 13, select option: **VPN** and enable the field: **Enable IPSEC VPN**, and then select: **Apply Changes**.

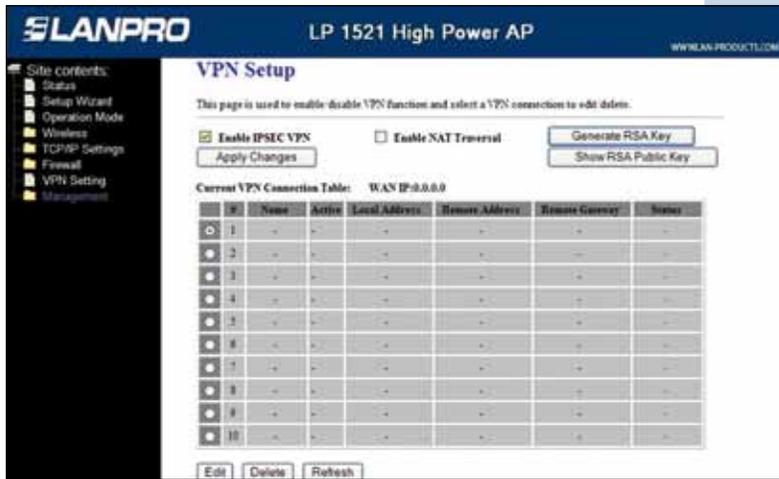


Figure 13

14

Once changes are done, select: **OK**, as shown in figure 14.

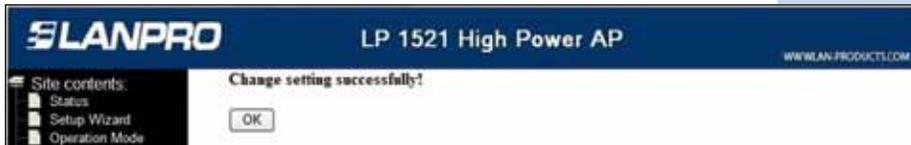


Figure 14

15

As shown in figure 15, the first tunnel is already selected by default. If you wish to edit the values, please select option: **Edit**.

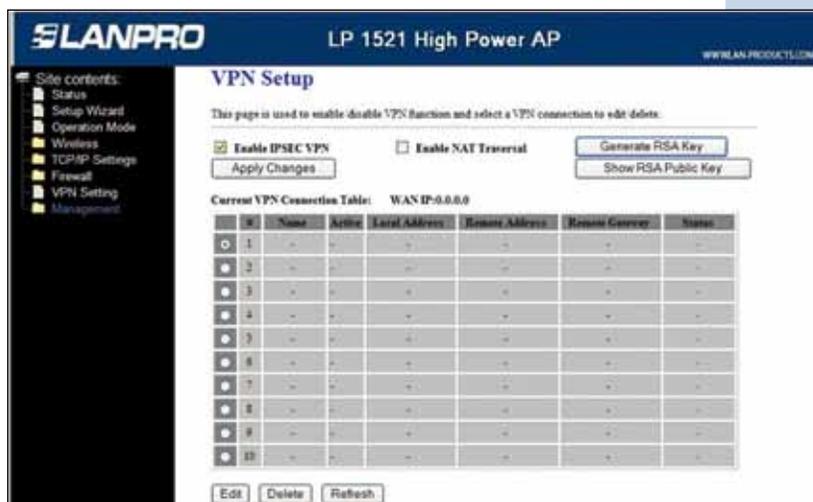


Figure 15

16

Input values as shown in figure 16 and then select: **Apply Changes**.
For the yellow segment LP-1521, please refer to the table shown in paragraph 18.

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Site contents:
 Status
 Setup Wizard
 Operation Mode
 Wireless
 TCP/IP Settings
 Firewall
 VPN Setting
 Management

VPN Setup

Enable Tunnel 1

Connection Name: Tunnel1

Auth Type: PSK

Local Site: Subnet Address

Local IP Address Network: 192.168.2.0

Local Subnet Mask: 255.255.255.0

Remote Site: Subnet Address

Remote Static Gateway:

Remote Gateway DomainName: labanul.dyn dns.org

Remote IP Address Network: 192.168.1.0

Remote Subnet Mask: 255.255.255.0

Local/Peer ID:

Local ID Type: IP

Local ID:

Remote ID Type: IP

Remote ID:

Key Management: IKE Manual Advanced

Connection Type: Responder

ESP: 3DES (Encryption Algorithm)

MD5 (Authentication Algorithm)

PreShared Key: 1234567890

Remote RSA Key:

Status: Disconnected

Figure 16

17

Once the changes are applied, select: **OK**, as shown in figure 17.

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Site contents:
 Status
 Setup Wizard
 Operation Mode

Change setting successfully!

Figure 17

Wait for a minute until the tunnel establishes.

18

Table with both LP-1521 located in the blue and yellow segments.

	Blue	Yellow
Enable Tunnel 1	x	x
Connection Name	Tunnel 1	Tunnel 1
Auth Type	PSK	PSK
Local Site	Subnet Address	Subnet Address
Local IP Address/Network	192.168.1.0	192.168.2.0
Local Subnet Mask	255.255.255.0	255.255.255.0
Remote Site	Subnet Address	Subnet Address
Remote Secure Getway		
Remote Getway Domain Name	labamarillo.dyndns.org	labazul.dyndns.org
Remote IP Address/Network	192.168.2.0	192.168.1.0
Remote Subnet Mask	255.255.255.0	255.255.255.0
Local ID Type	IP	IP
Local ID		
Remote ID Type	IP	IP
Remote ID		
Key Management	IKE	IKE
Connection Type	Initiator	Responder
ESP	3DES	3DES
	MD5	MD5
PreShared Key	1234567890	1234567890

19

If you wish to force a tunnel connection, in the window shown in figure 19, select: **connect** from any point of the VPN. The tunnel will stay in open state while it is enabled.

The screenshot shows a configuration window for a VPN tunnel. At the top, there are radio buttons for 'IKE' (selected), 'Manual', and 'Advanced'. Below this, the 'Connection Type' is set to 'Responder' with a dropdown arrow, and there are 'Connect' and 'Disconnect' buttons. The 'ESP' section shows '3DES' for the encryption algorithm and 'MD5' for the authentication algorithm, both with dropdown arrows. The 'PreShared Key' field contains '1234567890'. The 'Remote RSA Key' field is empty. The 'Status' is indicated as 'Disconnected' in red text. At the bottom, there are buttons for 'Apply Changes', 'Reset', 'Refresh', and 'Back'.

Figure 19

20

If you wish to verify your VPN, in figure 20 you can:

1. Visualize the connected state in the VPN window any of the LP-1521's.
2. Send a PING from one equipment in the Yellow sub network to one in the blue subnetwork or vice-versa.

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VPN Setup

This page is used to enable/disable VPN function and select a VPN connection to edit/delete.

Enable IPSEC VPN Enable NAT Traversal

Current VPN Connection Table: WAN IP:190.74.115.226

ID	Name	Active	Local Address	Remote Address	Remote Gateway	Status
1	test01	Y	192.168.2.0/24	192.168.1.0/24	0.0.0.0	Connected
2	-	-	-	-	-	-
3	-	-	-	-	-	-
4	-	-	-	-	-	-
5	-	-	-	-	-	-
6	-	-	-	-	-	-
7	-	-	-	-	-	-
8	-	-	-	-	-	-
9	-	-	-	-	-	-
10	-	-	-	-	-	-

Figure 20