

Level1 router IPSec VPN setting (static IP vs. static IP)

Level1 router is applicable to FBR-1407, FBR-1409TX, FBR-1417TX,
WBR-2401, WBR-3403TX, WBR-3404TX and WBR-3402

1. Please config Router A as follow pictures.
 - 1.1 enable VPN and configure Max. Number of tunnel.
 - 1.2 Enter Tunnel Name then press “Save”
 - 1.3 Press “More”

The screenshot shows the web management interface for a Level1 Broadband Router. The browser window title is "FBR-1407A Broadband Router Web Management - Microsoft Internet Explorer". The address bar shows "http://192.168.10.1/". The page title is "BroadbandRouter Configuration". The navigation menu includes "Status/ Wizard/ Basic Setting/ Forwarding Rules/ Security Setting/ Advanced Setting/ Toolbox" and a "Logout" link. The "Security Setting" menu is expanded, showing "Packet Filters", "Domain Filters", "MAC Control", "VPN", and "Miscellaneous". The "VPN Settings" page is displayed, showing a table with columns "Item" and "Setting". The "VPN" item is checked "Enable". The "Max. number of tunnels" is set to "5". Below this is a table with columns "ID", "Tunnel Name", and "Method". The first row has ID "1" and Tunnel Name "ToRouterB". The Method column has a dropdown menu set to "IKE" and a "More" button. There are four more rows with empty Tunnel Name fields and "IKE" Method dropdowns. At the bottom of the page are buttons for "Save", "Undo", "Dynamic VPN Settings...", and "Help". The current time is displayed as "05/13/2003 17:05:55". The Windows taskbar at the bottom shows the Start button, several open applications, and the system tray with the time "下午 07:24".

Item	Setting
VPN	<input checked="" type="checkbox"/> Enable
Max. number of tunnels	5

ID	Tunnel Name	Method
1	ToRouterB	IKE More
2		IKE More
3		IKE More
4		IKE More
5		IKE More

1.4 Enter the follow information as below:

1.4.1 Local subnet: Router A subnet. Ex:192.168.10.0

1.4.2 Local netmask: Router A netmask. Ex:255.255.255.0

1.4.3 Remote subnet: Router B subnet. Ex:192.168.123.0

1.4.4 Local netmask: Router B netmask. Ex:255.255.255.0

1.4.5 Remote Gateway: Router B's WAN IP. Ex:61.218.92.157

1.4.6 Preshare Key: Key MUST same as Router B. Ex:1234567890

1.4.7 Press "Save"

The screenshot shows the web management interface for a LevelOne FBR-1407A Broadband Router. The browser window is titled "FBR-1407A Broadband Router Web Management - Microsoft Internet Explorer" and the address bar shows "http://192.168.10.1/". The page header includes the LevelOne logo and navigation links: Status/ Wizard/ Basic Setting/ Forwarding Rules/ Security Setting/ Advanced Setting/ Toolbox. The "Security Setting" menu is expanded, showing "VPN Settings - Tunnel 1 - IKE".

Item	Setting
Tunnel Name	ToRouterB
Local Subnet	192.168.10.0
Local Netmask	255.255.255.0
Remote Subnet	192.168.123.0
Remote Netmask	255.255.255.0
Remote Gateway	61.218.92.157
Preshare Key	1234567890
IKE Proposal index	Select IKE Proposal...
IPSec Proposal index	Select IPSec Proposal...

At the bottom of the settings area, there are buttons for "Save", "Undo", "Back", and "Help", along with the text "No change!". The current time is displayed as "05/13/2003 17:05:55". The Windows taskbar at the bottom shows the start button, several open applications, and the system clock at "下午 07:25".

1.5 Press “Select IKE Proposal”

1.5.1 Put Proposal Name: Ex: IKE1

1.5.2 DH Group: Ex:Group2

1.5.3 Encrypt algorithm: Ex:3DES

1.5.4 Auth. Algorithm: Ex: MD5

1.5.5 Life Time: Ex:28800

1.5.6 Then Select proposal ID 1 and add to index 1.

1.5.7 Press “save” and “Back”

level one BroadbandRouter
Status/ Wizard/ Basic Setting/ Forwarding Rules/ Security Setting/ Advanced Setting/ Toolbox Logout

Security Setting

Item Setting

IKE Proposal index

IKE1 Remove

ID	Proposal Name	DH Group	Encrypt. algorithm	Auth. algorithm	Life Time	Life Time Unit
1	IKE1	Group 2	3DES	MD5	28800	Sec.
2		Group 1	3DES	SHA1	0	Sec.
3		Group 1	3DES	SHA1	0	Sec.
4		Group 1	3DES	SHA1	0	Sec.
5		Group 1	3DES	SHA1	0	Sec.
6		Group 1	3DES	SHA1	0	Sec.
7		Group 1	3DES	SHA1	0	Sec.
8		Group 1	3DES	SHA1	0	Sec.
9		Group 1	3DES	SHA1	0	Sec.
10		Group 1	3DES	SHA1	0	Sec.

Current Time
05/13/2003 17:05:55

Proposal ID -- select one -- Add to Proposal index

Save Undo Back Help

完成
開始 FBR-1407A Broadban... Yahoo! 奇摩新聞... 2 - 小畫家 下午 07:26

1.6 Press “select IPsec proposal”

1.6.1 Put Proposal Name: Ex: IPsec1

1.6.2 DH Group: Ex:Group2

1.6.3 Encap protocol : Ex. ESP

1.6.4 Encrypt algorithm: Ex:3DES

1.6.5 Auth. Algorithm: Ex: MD5

1.6.6 Life Time: Ex:28800

1.6.7 Then Select proposal ID 1 and add to index 1.

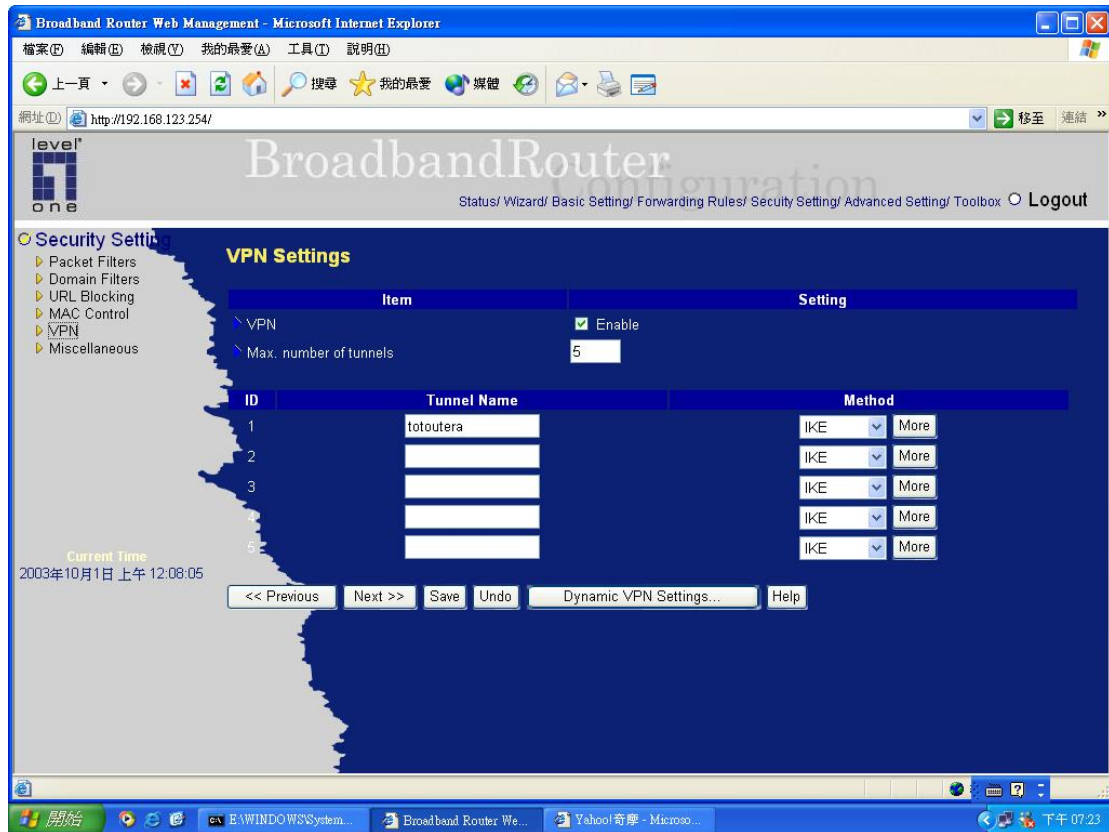
1.6.8 Press “save” and “Reboot”

The screenshot shows the web management interface for the FBR-1407A Broadband Router. The browser window title is "FBR-1407A Broadband Router Web Management - Microsoft Internet Explorer". The address bar shows "http://192.168.10.17". The page title is "BroadbandRouter" and the navigation menu includes "Status/ Wizard/ Basic Setting/ Forwarding Rules/ Security Setting/ Advanced Setting/ Toolbox" and a "Logout" link. The "Security Setting" section is active, showing the "IPsec Proposal index" configuration page. The table below lists the IPsec proposals:

ID	Proposal Name	DH Group	Encap. protocol	Encrypt. algorithm	Auth. algorithm	Life Time	Life Time Unit
1	IPSec1	Group 2	ESP	3DES	MD5	28800	Sec.
2		None	ESP	3DES	None	0	Sec.
3		None	ESP	3DES	None	0	Sec.
4		None	ESP	3DES	None	0	Sec.
5		None	ESP	3DES	None	0	Sec.
6		None	ES	3DES	None	0	Sec.
7		None	ES	3DES	None	0	Sec.
8		None	ES	3DES	None	0	Sec.
9		None	ES	3DES	None	0	Sec.
10		None	ES	3DES	None	0	Sec.

The "Current Time" is 05/13/2003 17:05:55. The "Add to Proposal index" button is visible at the bottom of the table.

2. Please config Router B as follow pictures
- 2.1 enable VPN and configure Max. Number of tunnel.
- 2.2 Enter Tunnel Name then press “Save”
- 2.3 Press “More”



2.4 Enter the follow information as below:

2.4.1 Local subnet: Router B subnet. Ex:192.168.123.0

2.4.2 Local netmask: Router B netmask. Ex:255.255.255.0

2.4.3 Remote subnet: Router A subnet. Ex:192.168.10.0

2.4.4 Local netmask: Router A netmask. Ex:255.255.255.0

2.4.5 Remote Gateway: Router A's WAN IP. Ex:61.59.223.208

2.4.6 Preshare Key: Key MUST same as Router A. Ex:1234567890

2.4.7 Press "Save"

The screenshot shows the 'Broadband Router Web Management' interface in Microsoft Internet Explorer. The browser address bar shows 'http://192.168.123.254/'. The page title is 'BroadbandRouter' and it includes a navigation menu with options like 'Status', 'Wizard', 'Basic Setting', 'Forwarding Rules', 'Security Setting', 'Advanced Setting', 'Toolbox', and 'Logout'. The main content area is titled 'VPN Settings - Tunnel 1 - IKE' and contains a table with configuration fields.

Item	Setting
Tunnel Name	totouterA
Local Subnet	192.168.123.0
Local Netmask	255.255.255.0
Remote Subnet	192.168.10.0
Remote Netmask	255.255.255.0
Remote Gateway	61.59.223.208
Preshare Key	1234567890
IKE Proposal index	Select IKE Proposal...
IPSec Proposal index	Select IPSec Proposal...

At the bottom of the configuration area, there are buttons for 'Save', 'Undo', 'Back', and 'Help', along with the text 'No change!'. The current time is displayed as '2003年10月1日 上午 12:08:57'. The Windows taskbar at the bottom shows the system tray with the time '下午 07:23' and several open applications including 'E:\WINDOWS\System...', 'Broadband Router We...', 'Yahoo!奇摩 - Microso...', and 'BtoA_1 - 小畫家'.

2.5 Press “Select IKE Proposal”

2.5.1 Put Proposal Name: Ex: IKE1

2.5.2 DH Group: Ex:Group2

2.5.3 Encrypt algorithm: Ex:3DES

2.5.4 Auth. Algorithm: Ex: MD5

2.5.5 Life Time: Ex:28800

2.5.6 Then Select proposal ID 1 and add to index 1.

2.5.7 Press “save” and “Back”

The screenshot shows the 'Broadband Router Web Management' interface in Microsoft Internet Explorer. The main content area is titled 'Security Settings' and 'IKE Proposal index'. A table lists the configuration for various IKE proposals. The first proposal, 'ike1', is highlighted. Below the table, there is a 'Proposals' list with a 'Remove' button. At the bottom, there are 'Save', 'Undo', 'Back', and 'Help' buttons.

ID	Proposal Name	DH Group	Encrypt. algorithm	Auth. algorithm	Life Time	Life Time Unit
1	ike1	Group 2	3DES	MD5	28800	Sec.
2		Group 1	3DES	SHA1	0	Sec.
3		Group 1	3DES	SHA1	0	Sec.
4		Group 1	3DES	SHA1	0	Sec.
5		Group 1	3DES	SHA1	0	Sec.
6		Group 1	3DES	SHA1	0	Sec.
7		Group 1	3DES	SHA1	0	Sec.
8		Group 1	3DES	SHA1	0	Sec.
9		Group 1	3DES	SHA1	0	Sec.
10		Group 1	3DES	SHA1	0	Sec.

Current Time: 2003年10月1日 上午 12:09:41

Proposals: -- select one -- Add to Proposal index

2.6 Press “select IPsec proposal”

2.6.1 Put Proposal Name: Ex: IPsec1

2.6.2 DH Group: Ex:Group2

2.6.3 Encap protocol : Ex. ESP

2.6.4 Encrypt algorithm: Ex:3DES

2.6.5 Auth. A;gorithm: Ex: MD5

2.6.6 Life Time: Ex:28800

2.6.7 Then Select proposal ID 1 and add to index 1.

Press “save” and “Reboot”

The screenshot shows the 'VPN Settings - Tunnel 1 - Set IPsec Proposal' page in a web browser. The interface includes a navigation menu on the left with options like Packet Filters, Domain Filters, URL Blocking, MAC Control, VPN, and Miscellaneous. The main content area features a table of IPsec proposals and a list of indices to be added to the proposal index.

ID	Proposal Name	DH Group	Encap. protocol	Encrypt. algorithm	Auth. algorithm	Life Time	Life Time Unit
1	ipsec1	Group 2	ESP	3DES	MD5	28800	Sec.
2		None	ESP	3DES	None	0	Sec.
3		None	ESP	3DES	None	0	Sec.
4		None	ESP	3DES	None	0	Sec.
5		None	ESP	3DES	None	0	Sec.
6		None	ESP	3DES	None	0	Sec.
7		None	ESP	3DES	None	0	Sec.
8		None	ESP	3DES	None	0	Sec.
9		None	ESP	3DES	None	0	Sec.
10		None	ESP	3DES	None	0	Sec.

Current Time: 2003年10月1日 上午 12:10:34

Proposal ID: -- select one -- Add to Proposal index

3. Try to initial VPN tunnel: Ex. Try to ping a device located router A from router B.

The screenshot shows a web browser window displaying the 'Broadband Router Web Management' interface. The page title is 'Broadband Router' and the URL is 'http://192.168.123.254/'. The interface includes a navigation menu with options like 'Status', 'Wizard', 'Basic Setting', 'Forwarding Rules', 'Security Setting', 'Advanced Setting', 'Toolbox', and 'Logout'. The 'Status' section is active, showing 'System Status' with a table of WAN and Peripheral status.

Item	WAN Status	Sidenote
IP Address	61.218.92.157	Static IP
Subnet Mask	255.255.255.248	
Gateway	61.218.92.153	
Ethernet adapter 區域連線:	210.62.128.1, 210.62.128.2	

Peripheral Status	Sidenote
Not ready	

Inbound	Outbound
161966	41070
311	306
86	0

Overlaid on the interface is a Windows command prompt window titled 'E:\WINDOWS\system32\cmd.exe'. It shows the output of a ping command to 192.168.10.1:

```
E:\Documents and Settings\Winson>ping 192.168.10.1
200
Pinging 192.168.10.1 with 32 bytes of data:

Reply from 192.168.10.1: bytes=32 time=107ms TTL=63
Reply from 192.168.10.1: bytes=32 time=106ms TTL=63
Reply from 192.168.10.1: bytes=32 time=105ms TTL=63
Reply from 192.168.10.1: bytes=32 time=104ms TTL=63

Ping statistics for 192.168.10.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 104ms, Maximum = 107ms, Average = 105ms

E:\Documents and Settings\Winson>
```

Finish!!!