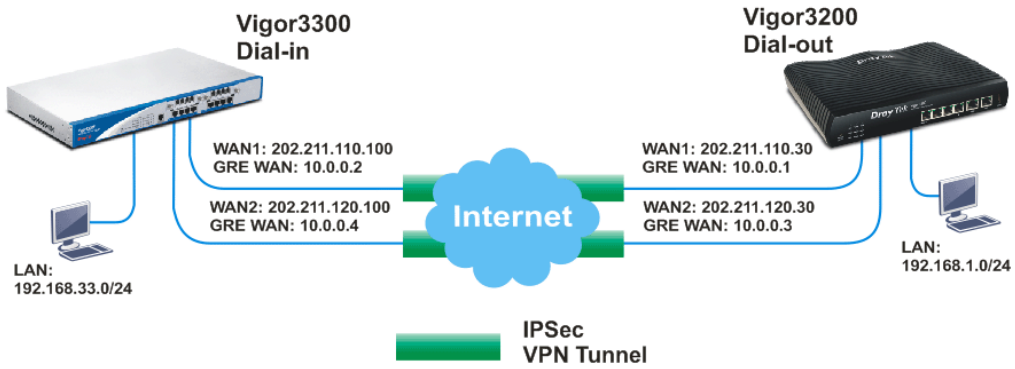
VPN Trunk Load-Balance between Vigor3200 and Other Vigor Router

This section will discuss how to build VPN Trunk with load-balance between Vigor3200 and other router (e.g., Vigor3300).

Scenario 1: One-pair VPN Trunk

The purpose is to setup a VPN trunk between Vigor3200 (192.168.1.0/24) and Vigor3300 (192.168.33.0/24).



At present, Vigor3200 just supports one VPN trunk group with two members for the same VPN network pair. In this case, the VPN trunk is built for 192.168.1.0/24 <-> 192.168.33.0/24. In other word, although Vigor3200 supports 4 WAN connections, it just allows you to use 2 VPN connections over two WAN ports for one VPN trunk group between the networks 192.168.1.0/24 and 192.168.33.0/24.

Note:

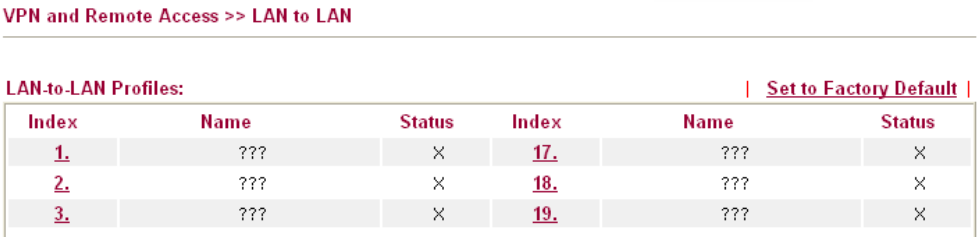
- You can still setup two VPN trunk groups over 4 WAN connections between the networks 192.168.1.0/24 and 192.168.33.0/24. But the VPN traffic can just pass through one VPN trunk group.
- You can create arbitrary number of VPN trunk groups between Vigor3200 and Vigor3300 for different VPN network pairs. For example, suppose there is another network (192.168.10.0/24) behind Vigor3300. You may create a VPN trunk group over WAN1 and WAN2 connections for 192.168.1.0/24 <-> 192.168.33.0/24, and the other VPN trunk group over WAN3 and WAN4 for 192.168.1.0/24 <-> 192.168.10.0/24. Please refer to the Scenario 2 described in this document later.

Vigor3200 as a VPN client (dial out site),
LAN: 192.168.1.0/24
WAN 1 IP: 202.211.110.30 (My GRE IP, 10.0.0.1, Peer GRE IP, 10.0.0.2)
WAN 2 IP: 202.211.120.30 (My GRE IP, 10.0.0.3, Peer GRE IP, 10.0.0.4)

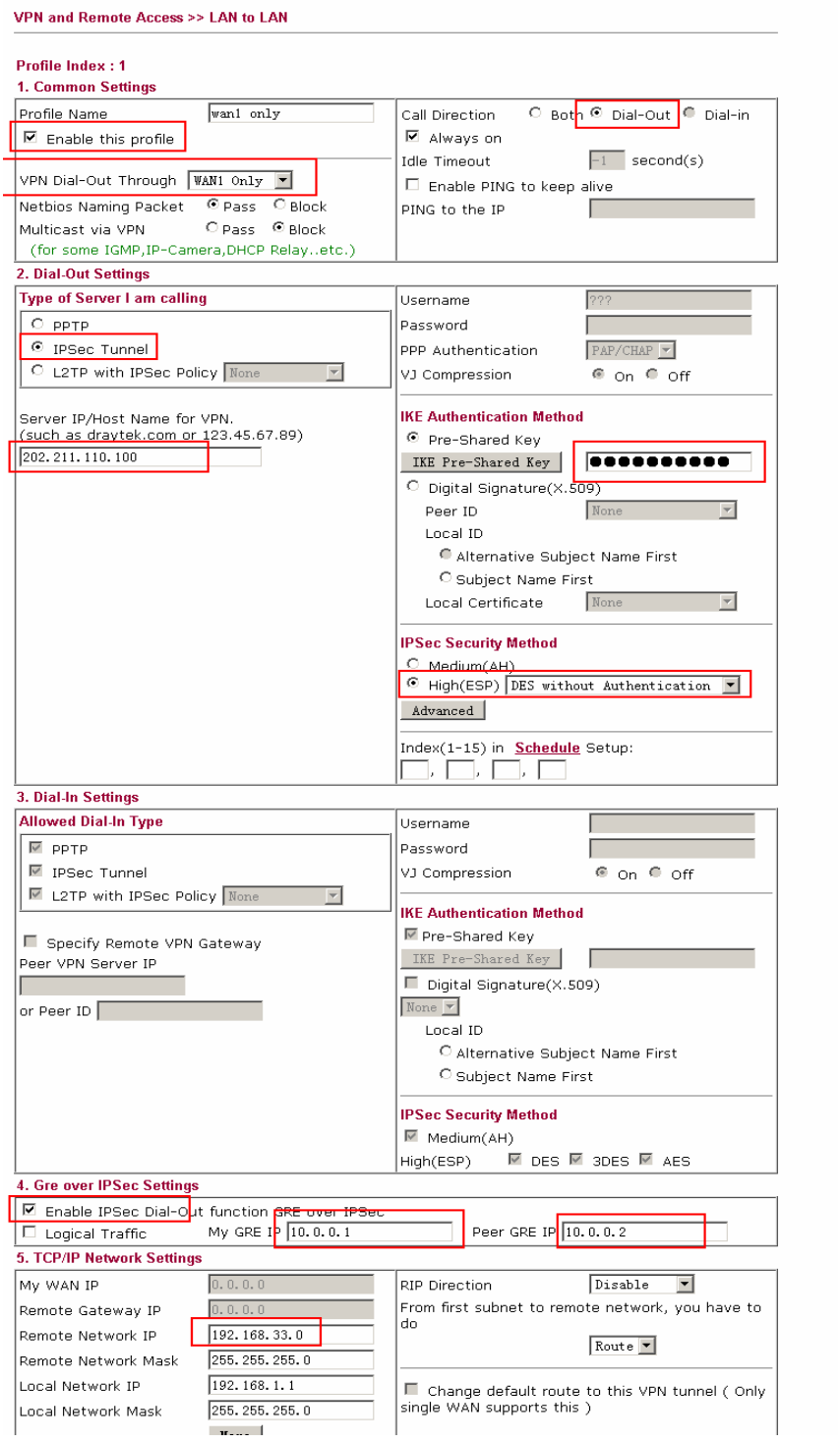
Vigor3300 as a VPN server (dial in site),
LAN: 192.168.33.0/24
WAN 1 IP: 202.211.110.100 (Local GRE IP, 10.0.0.2, Remote GRE IP, 10.0.0.1)
WAN 2 IP: 202.211.120.100 (Local GRE IP, 10.0.0.4, Remote GRE IP, 10.0.0.3)

Settings for Vigor 3200:

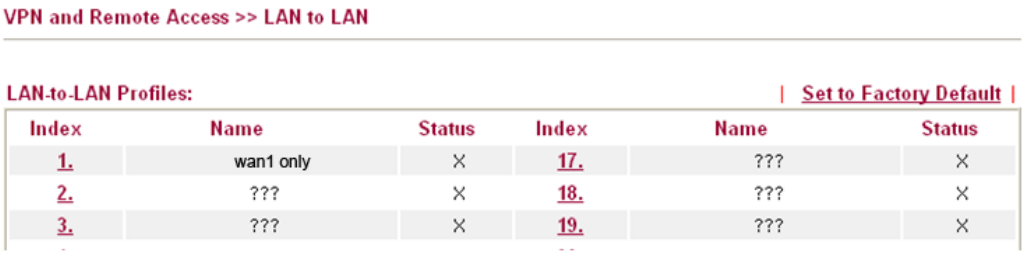
1. Open **VPN and Remote Access>>>LAN to LAN**. Choose Index number **1** for configuring a VPN LAN to LAN profile.



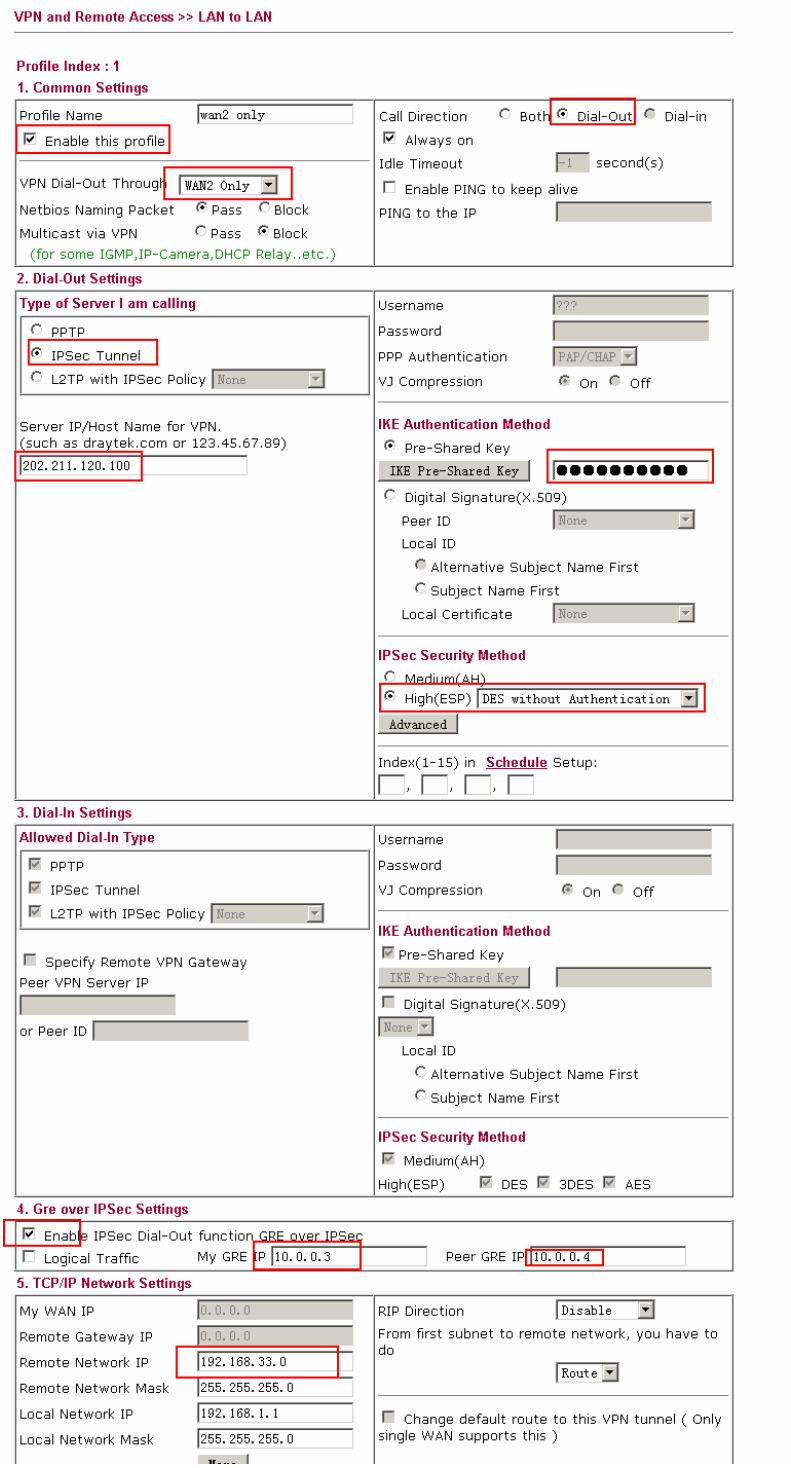
2. In the following page, please configure the settings as the following figure.



3. Click **OK** to save the configuration and return to previous page. Choose Index number **2** for configuring another VPN LAN to LAN profile.

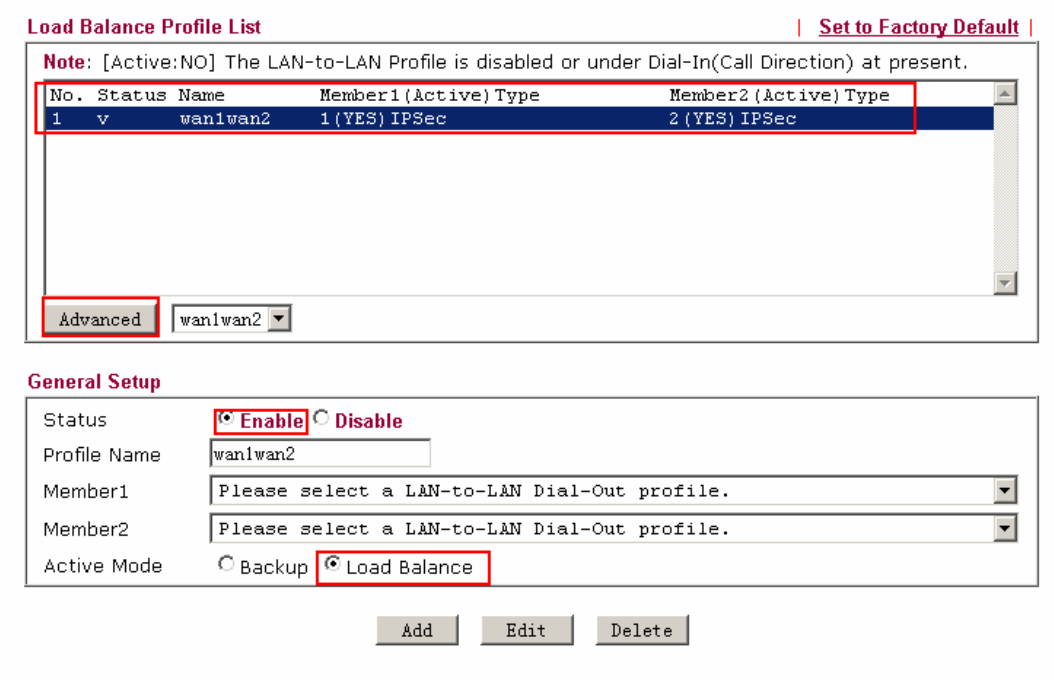


4. In this page, please configure the settings as the following figure.

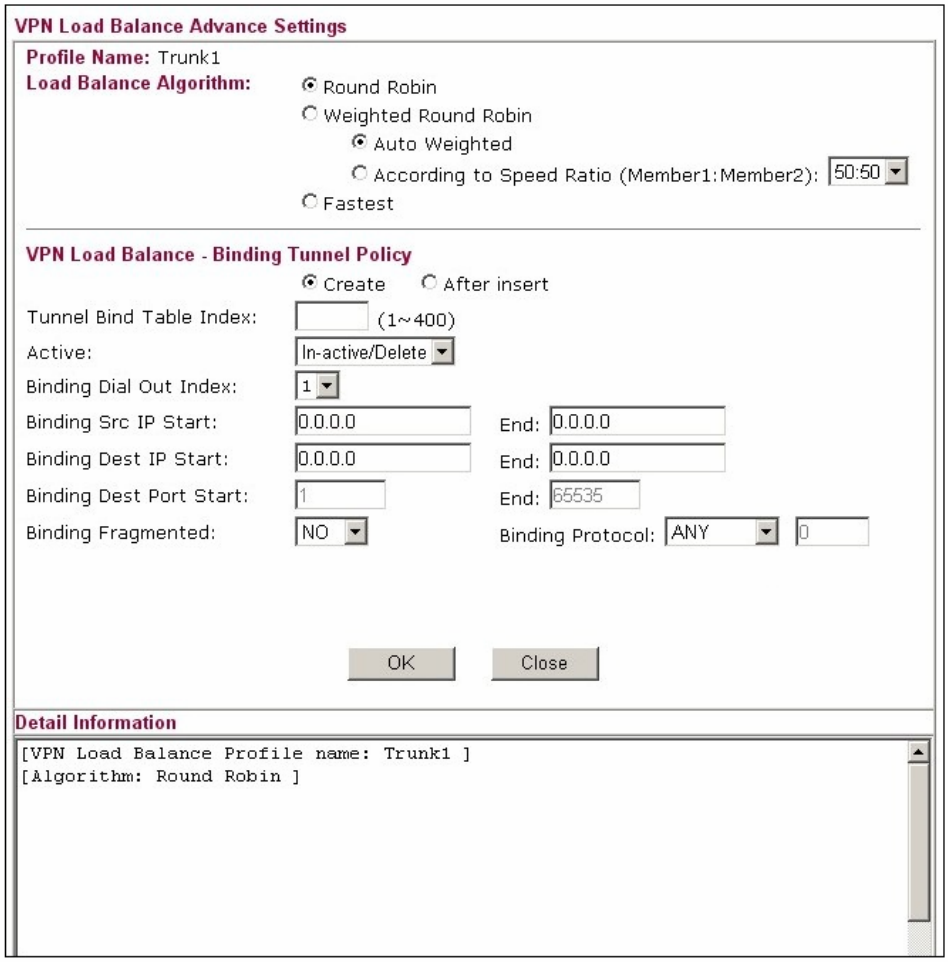


5. Click **OK** to save the configuration.

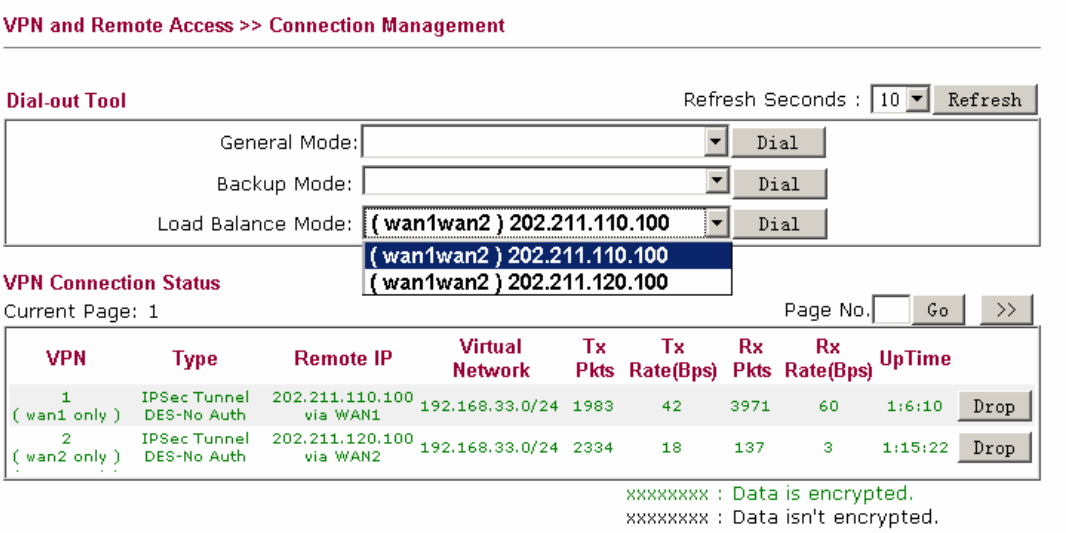
6. Open **VPN and Remote Access>>VPN TRUNK Management**. Add these VPN profiles to the VPN Trunk and set **Load Balance** as the **Attribute Mode**.



7. Click **Advanced** for specifying **Load Balance Algorithm**.

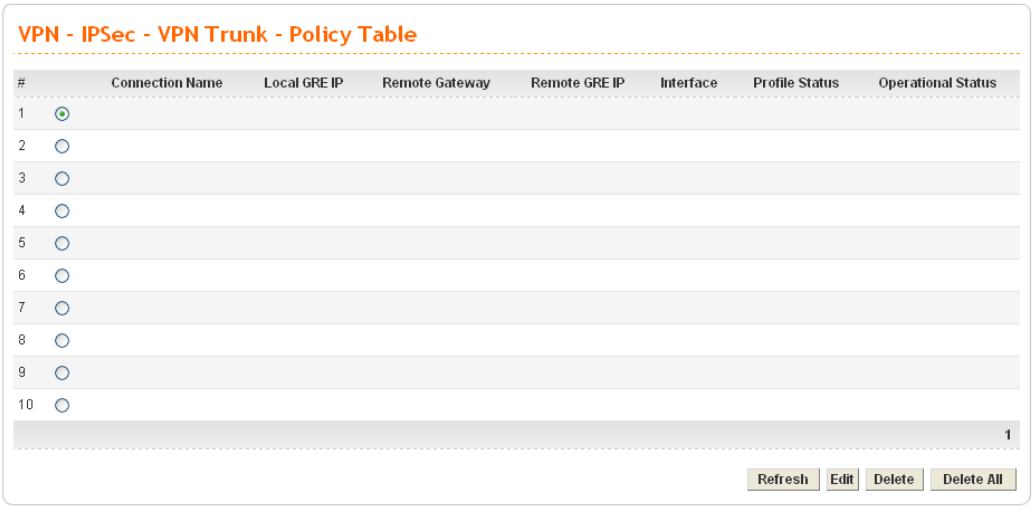


8. When the VPN trunk is successfully connected, you may check the connection status by viewing the page of **VPN and Remote Access>>Connection Management**. Transferred packets (Tx Pkts) will keep increasing through both tunnels when outgoing packets sent to the remote VPN network.

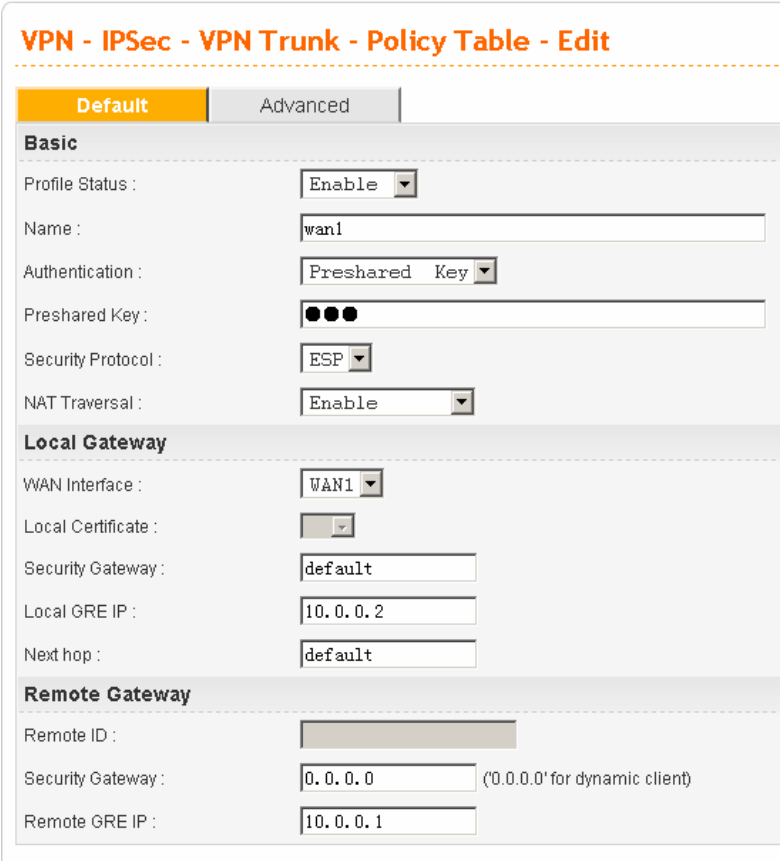


Settings for Vigor3300:

1. Open **VPN>>IPSec>>VPN Trunk>>Policy Table**. Choose Index **1** and click **Edit**.

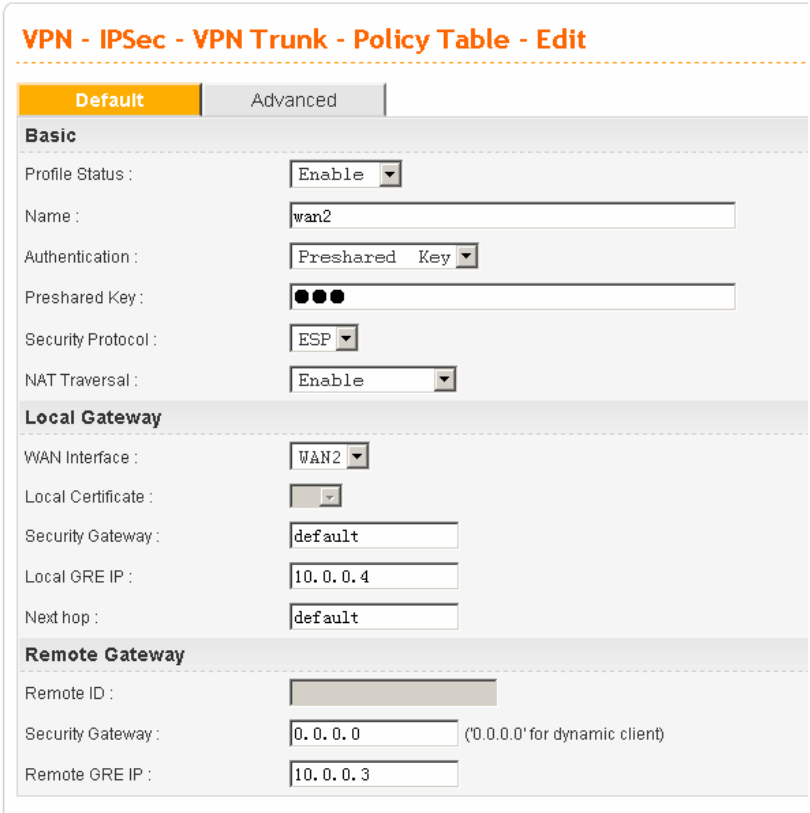


2. In this page, please configure the settings as the following figure.

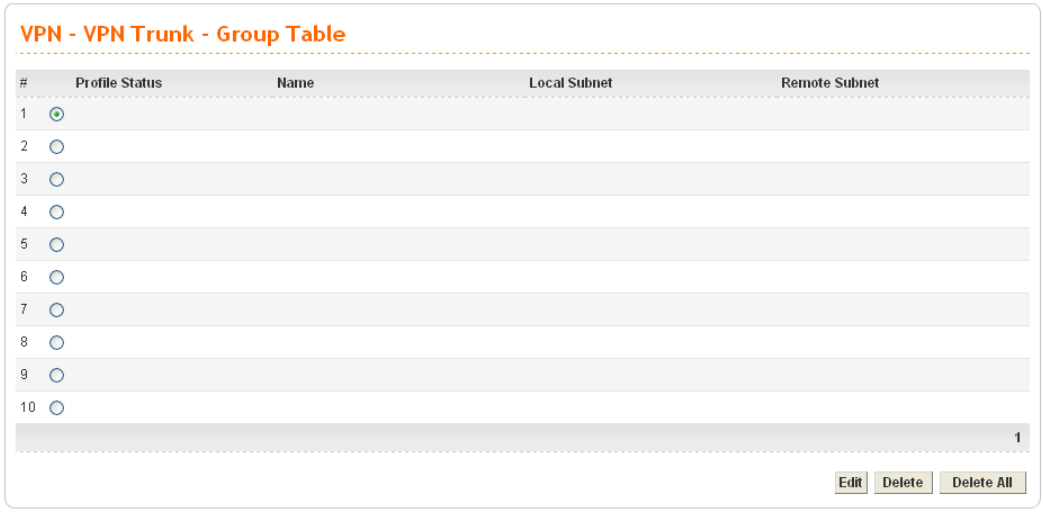


3. Click **Apply** to save the configuration and return to previous page. Choose Index **2** for configuring another VPN Trunk policy.

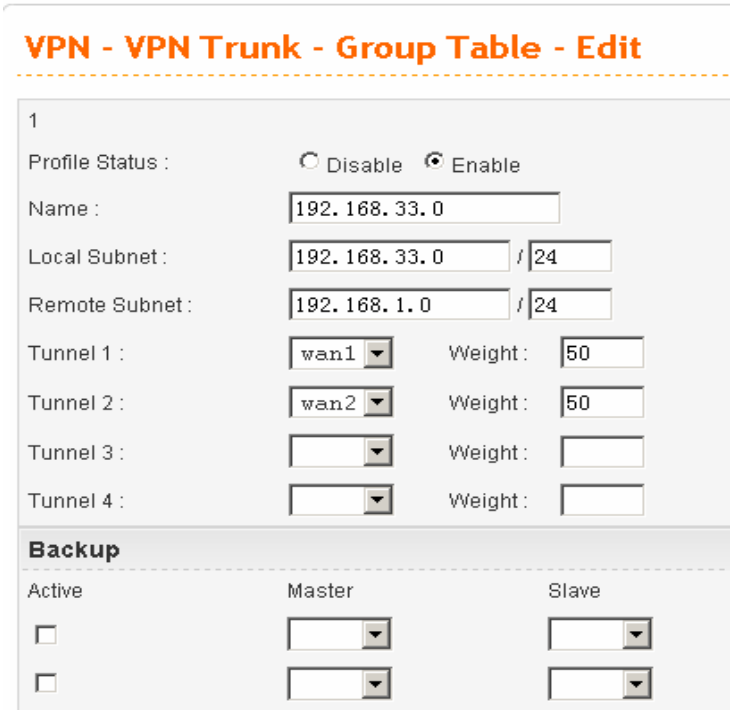
4. In this page, please configure the settings as the following figure.



5. Click **Apply** to save the configuration.
6. Open **VPN>>VPN Trunk>>Group Table** to group these two VPN policies.

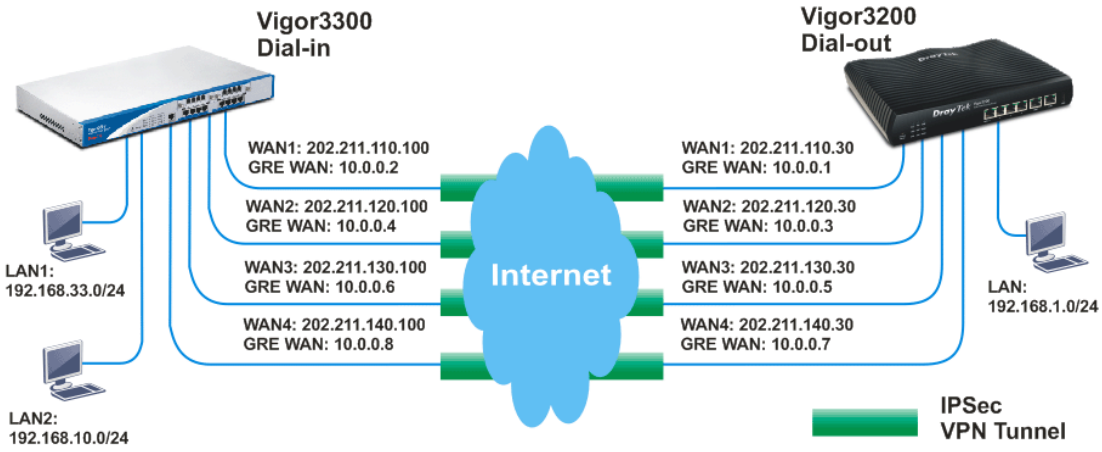


7. Choose Index 1 and click **Edit**. Add these two VPN profiles (wan1 and wan2) to a VPN Trunk.



Now, one-pair VPN trunk between Vigor3200 (192.168.1.0/24) and Vigor3300 (192.168.33.0/24) has be established.

Scenario 2: Two-pair VPN Trunk



Vigor3200 as VPN client (dial out site)
LAN: 192.168.1.0/24
WAN 1 IP: 202.211.110.30 (My GRE IP, 10.0.0.1, Peer GRE IP, 10.0.0.2)
WAN 2 IP: 202.211.120.30 (My GRE IP, 10.0.0.3, Peer GRE IP, 10.0.0.4)
WAN 3 IP: 202.211.130.30 (My GRE IP, 10.0.0.5, Peer GRE IP, 10.0.0.6)
WAN 4 IP: 202.211.140.30 (My GRE IP, 10.0.0.7, Peer GRE IP, 10.0.0.8)

Vigor3300 as VPN server (dial in site),
LAN1: 192.168.33.0/24
LAN2: 192.168.10.0/24
WAN 1 IP: 202.211.110.100 (Local GRE IP, 10.0.0.2, Remote GRE IP, 10.0.0.1)
WAN 2 IP: 202.211.120.100 (Local GRE IP, 10.0.0.4, Remote GRE IP, 10.0.0.3)
WAN 3 IP: 202.211.130.100 (Local GRE IP, 10.0.0.6, Remote GRE IP, 10.0.0.5)
WAN 4 IP: 202.211.140.100 (Local GRE IP, 10.0.0.8, Remote GRE IP, 10.0.0.7)

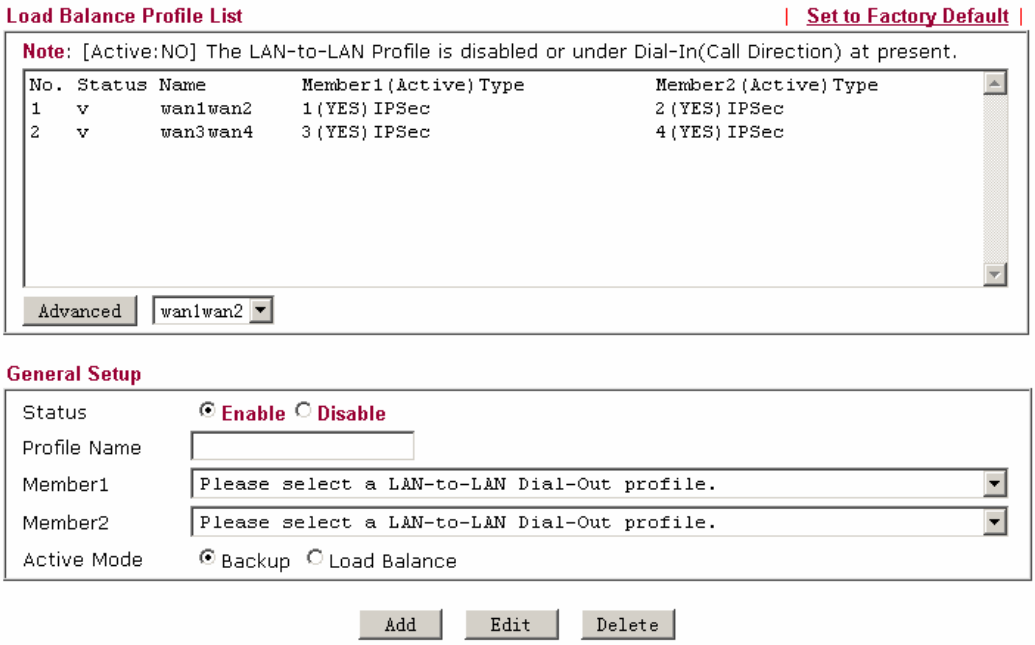
Settings for Vigor 3200:

1. Open **VPN and Remote Access>>>LAN to LAN**.
2. Create LAN to LAN profile 1-4. Setting configuration is the same as Scenario 1. The differences are, Remote Network IP of Profile 1 and Profile 2 must be 192.168.33.0/24 and Remote Network IP of Profile 3 and Profile 4 must be 192.168.10.0/24.

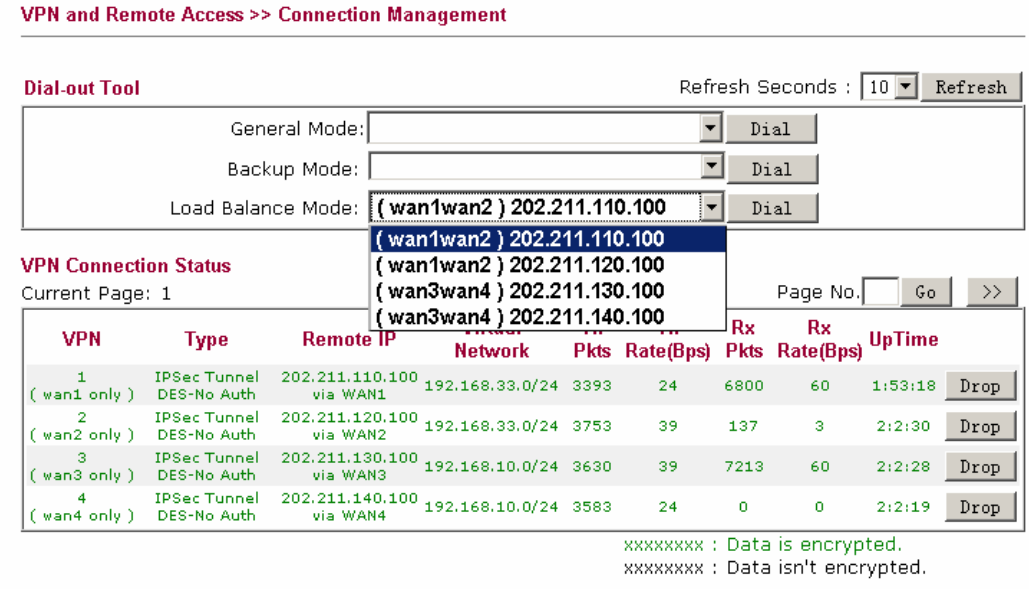
LAN-to-LAN Profiles: | Set to Factory Default |

Index	Name	Status	Index	Name	Status
1.	wan1 only	V	17.	???	X
2.	wan2 only	V	18.	???	X
3.	wan3 only	V	19.	???	X
4.	wan4 only	V	20.	???	X
5.	???	X	21.	???	X
6.	???	X	22.	???	X
7.	???	X	23.	???	X
8.	???	X	24.	???	X
9.	???	X	25.	???	X
10.	???	X	26.	???	X
11.	???	X	27.	???	X
12.	???	X	28.	???	X
13.	???	X	29.	???	X

3. Open **VPN and Remote Access>>VPN TRUNK Management**. Add these VPN profiles to the VPN Trunk and set **Load Balance** as the **Attribute Mode**. Setting configuration is the same as Scenario 1. Profile 1 and Profile 2 are one pair; Profile 3 and Profile 4 are the other pair.

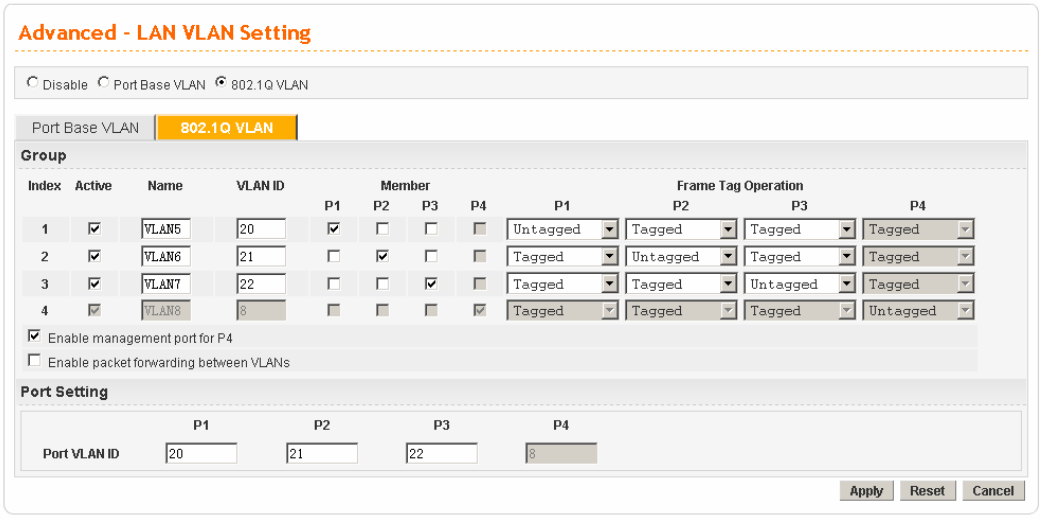


4. When the VPN trunk is successfully connected, you may check the connection status by viewing the page of **VPN and Remote Access>>Connection Management**. Transferred packets (Tx Pkts) will keep increasing through both tunnels when outgoing packets sent to the remote VPN network.

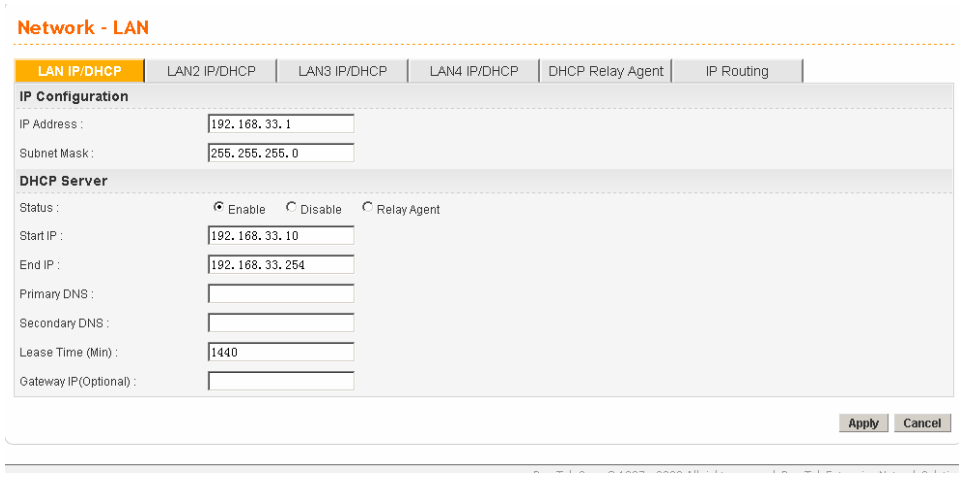


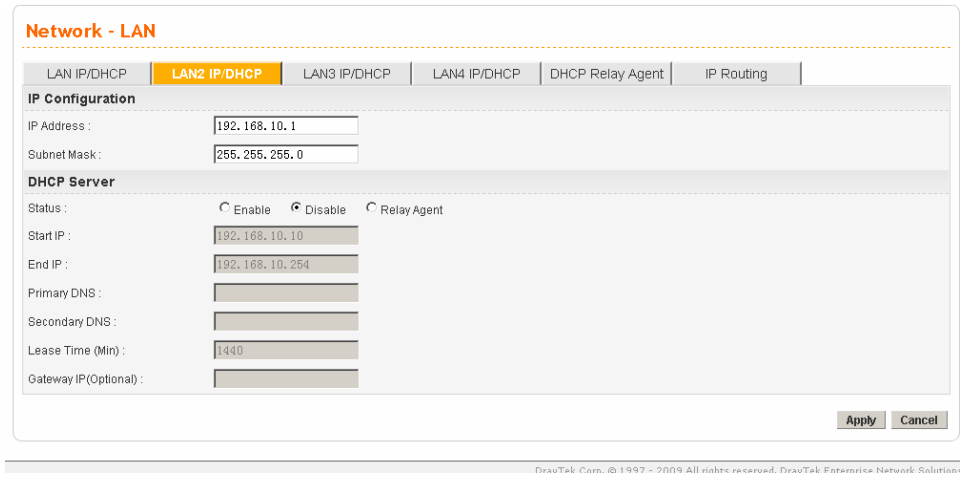
Settings for Vigor3300:

1. Open **Advanced>>LAN VLAN**. Choose the tab of **802.1Q VLAN**. Configure the settings as the following figure.



2. Next, open **Network>>LAN**. Set two LAN subnet: LAN1 192.168.33.0/24 and LAN2 192.168.10.0/24.

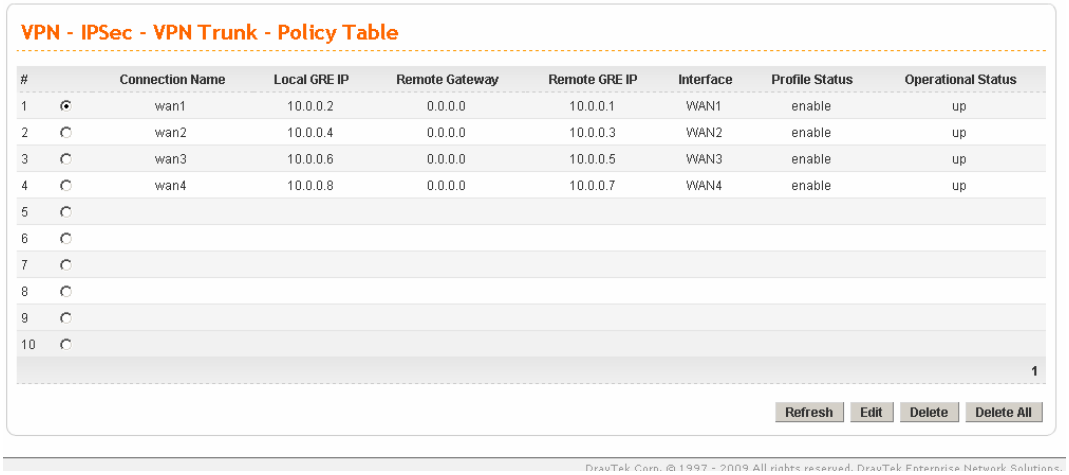




3. Click **Apply**.

4. Open **VPN>>IPSec>>VPN Trunk>>Policy Table** to create VPN Trunk policy.

The way to configure the setting is the same as Scenario 1.



VPN - IPSec - VPN Trunk - Policy Table

#		Connection Name	Local GRE IP	Remote Gateway	Remote GRE IP	Interface	Profile Status	Operational Status
1	◉	wan1	10.0.0.2	0.0.0.0	10.0.0.1	WAN1	enable	up
2	○	wan2	10.0.0.4	0.0.0.0	10.0.0.3	WAN2	enable	up
3	○	wan3	10.0.0.6	0.0.0.0	10.0.0.5	WAN3	enable	up
4	○	wan4	10.0.0.8	0.0.0.0	10.0.0.7	WAN4	enable	up
5	○							
6	○							
7	○							
8	○							
9	○							
10	○							

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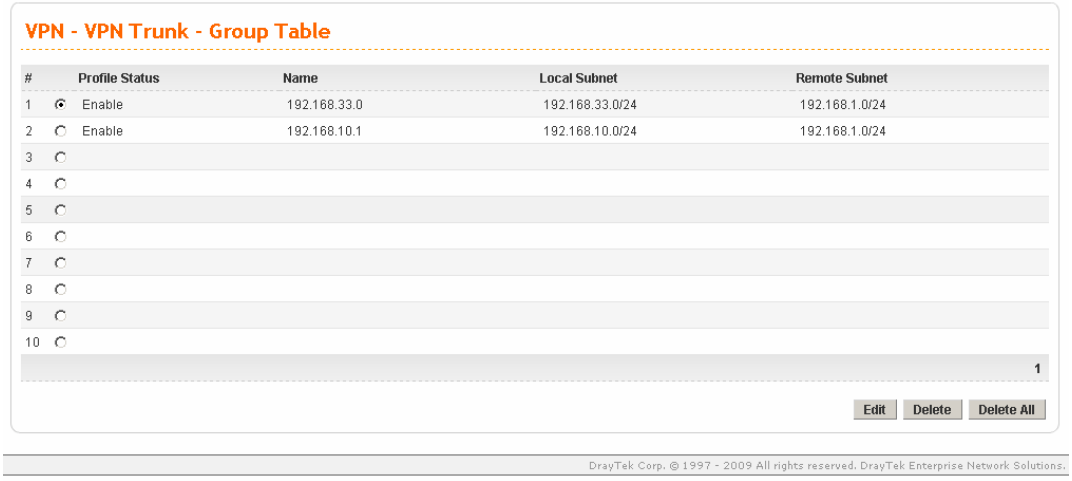
5. Open **VPN>>VPN Trunk>>Group Table** to group these VPN policies. Group two VPN policies as the following figure and then click **Apply**. The way to configure the setting is the same as Scenario 1.



VPN - VPN Trunk - Group Table

#		Profile Status	Name	Local Subnet	Remote Subnet
1	◉	Enable	192.168.33.0	192.168.33.0/24	192.168.1.0/24
2	○	Enable	192.168.10.1	192.168.10.0/24	192.168.1.0/24
3	○				
4	○				
5	○				
6	○				
7	○				
8	○				
9	○				
10	○				

1

Edit Delete Delete All

Now, two-pair VPN trunk between Vigor3200 (192.168.1.0/24) and Vigor3300 (192.168.33.0/24) has be established.