



Configuration of VPN Tunnel between DX Series Routers

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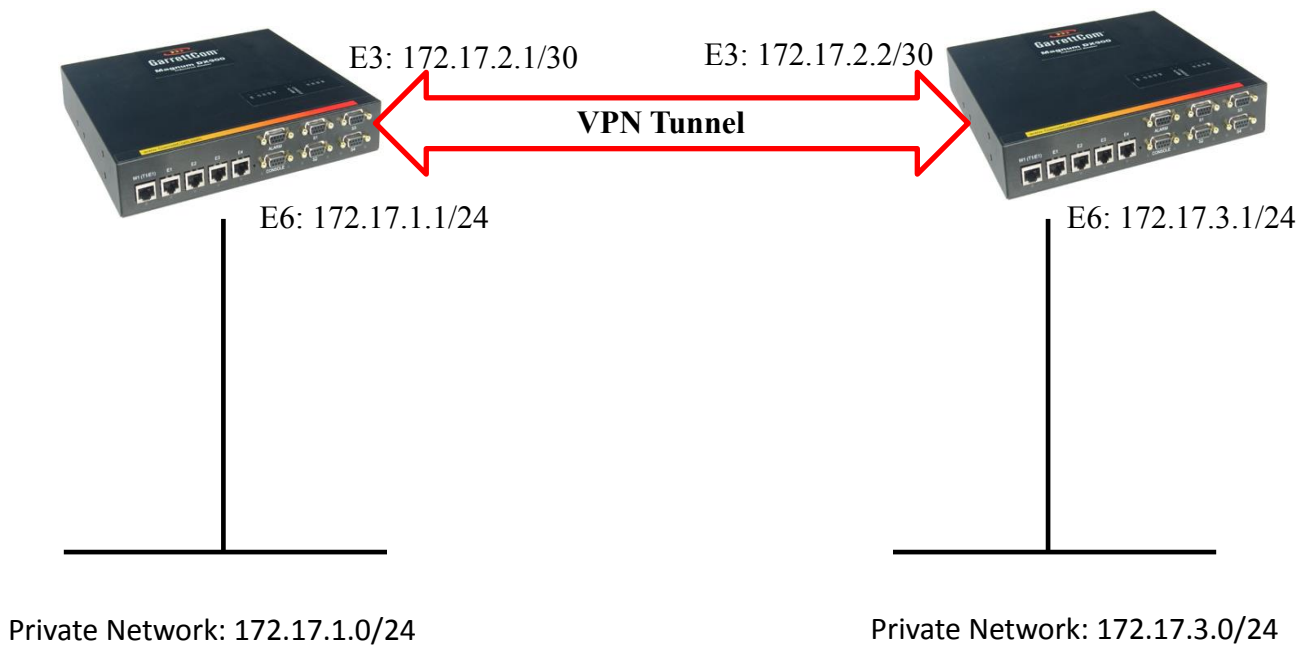
Featured Brands



Overview

The Magnum DX Series devices support VPN Tunneling. The following steps will take you through all steps of a basic example on how to configure a functional VPN tunnel.

In the below example, all the traffic traversing between networks 172.17.1.x to network 172.17.3.x and vice versa has to be encrypted and routed through the VPN tunnel between the routers of the two sites.



Configuration Steps:

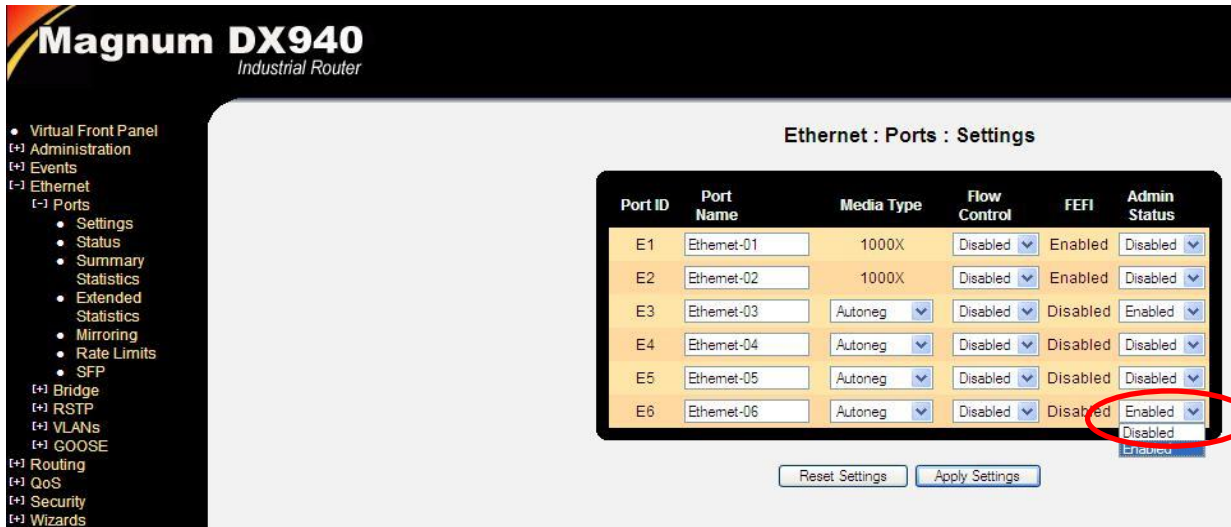
1. Log into DX Router



2. To enable VPN, the router needs have the MNS-DX-SECURE license. Go to Administration> Software Features and make sure that you have MNS-DX-SECURE license installed. If you do not have secure license, then please call 1-855-400-9071 and choose Option 2 to get a quotation.



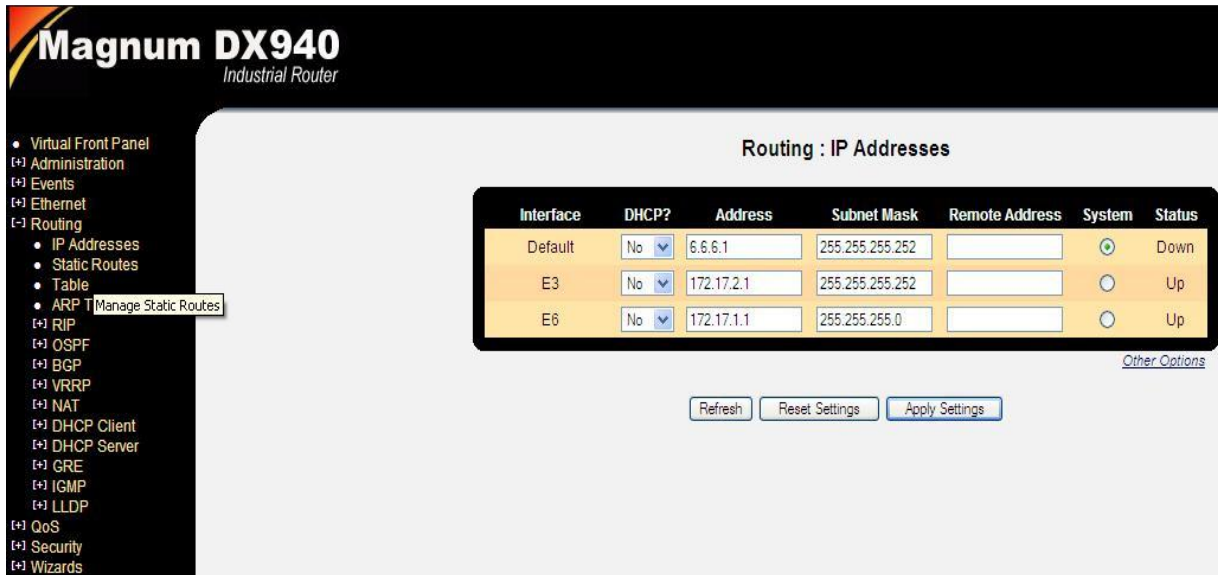
- Check that ports have been administratively enabled. Go to Ethernet > Ports > Settings. If they are not, then we have to enable the ports by selecting “enabled” from the Admin Status of the respective port(s).



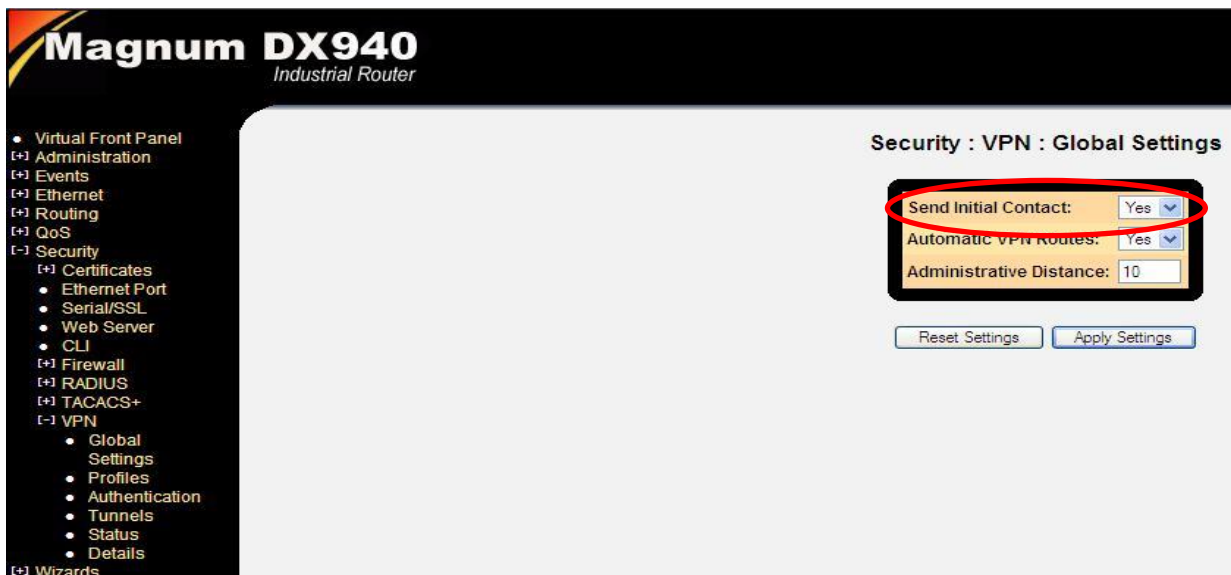
- By default, the Ethernet ports on the DX routers are configured as switch ports. This step involves “unbridging” the switchports and making them router ports. To unbridge a port, go to Ethernet > Bridge > Settings and choose “No” under “Bridged?” option for the respective port(s).



5. Check and assign the IP address and subnet mask (if not already assigned) to the router interfaces. Go to Routing > IP Addresses.



6. This part configures the VPN. Go to Security > VPN > Global Settings. Here the users have to determine if the local router will initiate a VPN connection to the remote site when it sees interesting traffic. If it will, then “Send Initial Contact” should be set to “Yes”. If the local router will only respond to the VPN request from remote router then “Send Initial Contact” should be set to “No”. In our test case, we will set both local and remote routers to initiate the contact to setup the tunnel.



- This step involves creating a profile that will determine the encryption algorithm and hash parameters for the Internet Key Exchange (IKE) and the frames (ESP) of the interesting traffic that will traverse between the router peers. Go to Security > VPN > Profiles.

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Security : VPN : Profiles

Add Profile

Name	IKE Encryption	IKE Hash	IKE Lifetime (secs)	ESP Encryption	ESP Hash	ESP Lifetime (secs)	DH Group	DPD Poll Time
VPN-to-Site B	3DES	SHA	28800	3DES	SHA	3600	2	30

Reset Settings Apply Settings

Existing Profiles

Name	IKE Encryption	IKE Hash	IKE Lifetime (secs)	ESP Encryption	ESP Hash	ESP Lifetime (secs)	DH Group	DPD Poll Time	Delete
Default	3DES	SHA	28800	3DES	SHA	3600	2	30	<input type="checkbox"/>
VPN-to-Site B	3DES	SHA	28800	3DES	SHA	3600	2	30	<input type="checkbox"/>

Reset Settings Apply Settings

- The VPN peers use authentication to form a trust relationship. The trust relationship could be established by either a pre-shared key, which can be a string of combination of alphanumeric and special characters. The same key has to be entered in both the peers. We could also use certificates that two peers might use to authenticate themselves to each other. Go to Security > VPN > Authentication to specify a shared key or certificate.

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Security : VPN : Authentication

Add Method

Name	Type	Preshared Key	Preshared Key Verify	Local Certificate
VPN-Auth	PSK	*****	*****	None

Reset Settings Apply Settings

Existing Methods

Name	Type	Preshared Key	Preshared Key Verify	Local Certificate	Delete
Default	PSK			None	<input type="checkbox"/>
VPN-Auth	PSK			None	<input type="checkbox"/>

Reset Settings Apply Settings

9. Here we define which source and destination traffic will be encrypted and sent via the VPN tunnel. Go to Security > VPN > Tunnel.

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Security : VPN : Tunnels

Add Tunnel

Source Address	Source Mask	Destination Address	Destination Mask	Destination Gateway	Profile	Authentication	Protocol	Always Up
172.17.1.0	255.255.255.0	172.17.3.0	255.255.255.0	172.17.2.2	VPN-to-Site B	VPN-Auth	any	Yes

Reset Settings Apply Settings

Existing VPN Tunnels

ID	Source Address	Source Mask	Destination Address	Destination Mask	Destination Gateway	Profile	Authentication	Protocol	Always Up	Delete
1	172.17.1.0	255.255.255.0	172.17.3.0	255.255.255.0	172.17.2.2	VPN-to-Site B	VPN-Auth	any	Yes	<input type="checkbox"/>

Reset Settings Apply Settings

This completes the VPN configuration. Now we can start some traffic between the networks 172.17.1.x and 172.17.3.x and see VPN status and details. Please turn over to the next page.

10. Check the status of VPN tunnel. If the configurations on both the VPN peers is good, the VPN tunnel will come “Up”. Go to Security > VPN > Status.

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Security : VPN : Status

Tunnel Statistics

ID	Source Address	Destination Address	Status	Time Remaining (secs)	Restart
1	172.17.1.0	172.17.3.0	VPN up	3546	<input type="checkbox"/>

Refresh Apply Settings

Virtual Front Panel
Administration
Events
Ethernet
Routing
QoS
Security
Certificates
Ethernet Port
Serial/SSL
Web Server
CLI
Firewall
RADIUS
TACACS+
VPN
Global Settings
Profiles
Authentication
Tunnels
Status
Details
Wizards View VPN Tunnel Status

11. Finally check the traffic statistics through the VPN tunnel. Go to Security > VPN > Details.

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Security : VPN : Details

Source Address	Destination Address	Inbound SPI	Outbound SPI	Remaining Time (secs)	Inbound Packets	Outbound Packets
172.17.1.0	172.17.3.0	33931192	E57E96F3	3391	561	381

Refresh

Virtual Front Panel
Administration
Events
Ethernet
Routing
QoS
Security
Certificates
Ethernet Port
Serial/SSL
Web Server
CLI
Firewall
RADIUS
TACACS+
VPN
Global Settings
Profiles
Authentication
Tunnels
Status
Details
Wizards