



1. Purpose

The purpose of this document is to provide instructions in order to correctly configure and establish a VPN tunnel between a Digi Connect Wan 3G and a Digi Transport VC7400.

2. VPN Settings of the Digi Connect Wan 3G

2.1 Global Settings

▼ VPN Global Settings

General Security Settings

Enable Antireplay

Miscellaneous Settings

Suppress SA lifetime during IKE phase 1

Suppress Delete Phase 1 SA Message For PFS

IP addresses of remote VPN peers may change on the fly (Dynamic DNS)

Apply



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2.2 VPN Policy Settings

VPN - Tunnel #1 - Configuration

Description:

VPN Tunnel:

Local Endpoint Type:

VPN Mode

Initiate client connections to and accept connections from the remote VPN device at:

Accept connections from any VPN device

Identity

Network Interface:

Negotiate tunnel as soon as interface comes up

Use the following as the identity:

Use the interface IP address

Use the identity certificate X.509 distinguished name (DN)

Local Endpoint

Tunnel Network Traffic from the following Local Network:

IP Address:

Subnet Mask:

Remote Endpoint

Tunnel Network Traffic to the following Remote Network:

IP Address:

Subnet Mask:

Pre-Shared Key Settings

Use the following IP address, FQDN, or username for the remote VPN's ID:

Use the following pre-shared key to negotiate IKE security settings:

ISAKMP Phase 1 Settings

General Security Settings for Phase 1

Connection Mode:

Enable Perfect Forward Secrecy (PFS)

NAT-T Settings

Enable NAT Traversal (NAT-T)

Keep Alive Interval:

ISAKMP Phase 1 Policies

Authentication	Encryption	Integrity	SA Lifetime	Diffie-Hellman	
Pre-Shared Key	AES (256-bit)	MD5	86400 secs	Group 5	Remove
<input type="text" value="Pre-Shared Key"/>	<input type="text" value="DES (64-bit)"/>	<input type="text" value="MD5"/>	<input type="text" value="86400"/> secs	<input type="text" value="Group 2"/>	Add

ISAKMP Phase 2 Settings

General Security Settings for Phase 2

Diffie-Hellman:

ISAKMP Phase 2 Policies

Use the following policies to negotiate security settings --Highest priority listed last:

Encryption	Authentication	SA Lifetime	
AES (256-bit)	MD5	28200 secs	Remove
<input type="text" value="None"/>	<input type="text" value="None"/>	<input type="text" value="28200"/> secs	Add



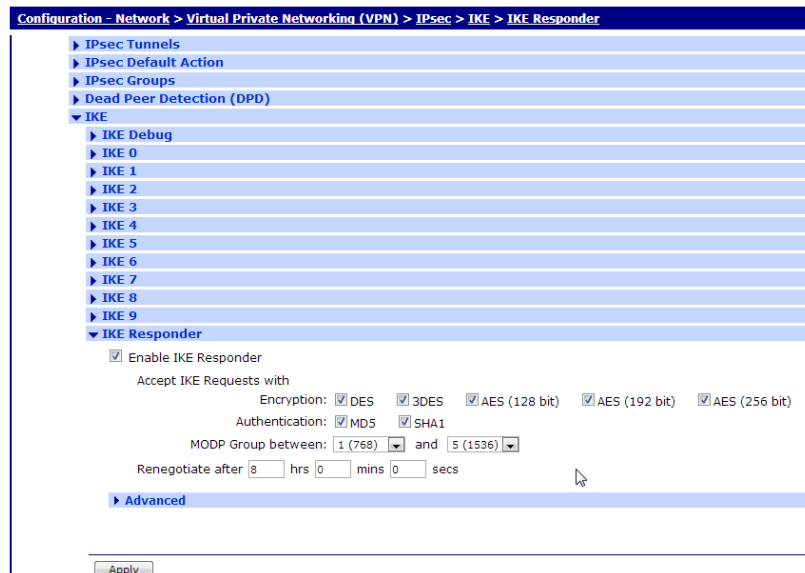
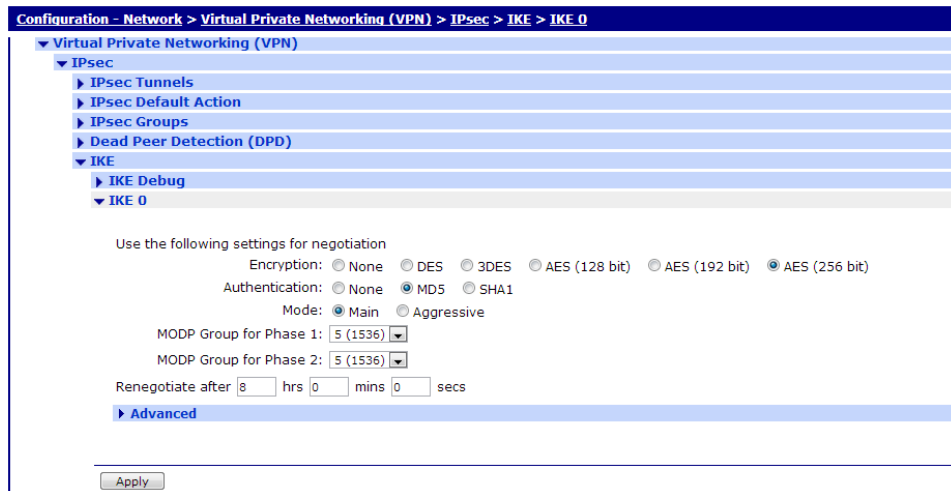
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3. Digi Transport VC7400 Settings



3.1 VPN Settings





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VPN Tunnel between Connect Wan 3G and Transport VC7400

Configuration - Network > Virtual Private Networking (VPN) > IPsec > IPsec Tunnels > IPsec 0 - 9 > IPsec 0

IPsec 0

Description: vc7400

The IP address or hostname of the remote unit

Use as a backup unit

Local LAN	Remote LAN
<input checked="" type="radio"/> Use these settings for the local LAN	<input checked="" type="radio"/> Use these settings for the remote LAN
IP Address: <input type="text" value="192.168.252.0"/>	IP Address: <input type="text" value="10.100.1.0"/>
Mask: <input type="text" value="255.255.255.0"/>	Mask: <input type="text" value="255.255.255.0"/>
<input type="radio"/> Use interface <input type="text" value="PPP"/> <input type="text" value="0"/>	<input type="radio"/> Remote Subnet ID: <input type="text"/>

Use the following security on this tunnel

Off Preshared Keys XAUTH Init Preshared Keys RSA Signatures XAUTH Init RSA

Our ID:

Our ID type: IKE ID FQDN User FQDN IPv4 Address

Remote ID:

Use encryption on this tunnel

Use authentication on this tunnel

Use Diffie Hellman group

Use IKE to negotiate this tunnel

Use IKE configuration:

Bring this tunnel up

All the time
 Whenever a route to the destination is available
 On demand

If the tunnel is down and a packet is ready to be sent:

Bring this tunnel down if it is idle for hrs mins secs

Renew the tunnel after

hrs mins secs

KBytes of traffic

Configuration - Network > Virtual Private Networking (VPN) > IPsec > IPsec Default Action

IPsec Default Action

- Interfaces
 - Ethernet
 - GRE
 - Serial
 - Advanced
- DHCP Server
- Network Services
 - DNS Servers
 - Dynamic DNS
 - IP Routing/Forwarding
- Virtual Private Networking (VPN)
 - IPsec
 - IPsec Tunnels
 - IPsec Default Action**

When a packet is received which does not match any IPsec tunnel

Pass the packet
 Drop the packet

When a packet is to be transmitted which does not match any IPsec tunnel

Pass the packet
 Drop the packet



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Configuration - Security > Users > User 0 - 9 > User 8

- User 3
- User 4
- User 5
- User 6
- User 7
- User 8

Username:

Password:

Confirm Password:

Access Level: Super

Advanced

Apply

Note : username = remote identity , password = preshared-key

4. VPN Connection Status and Debug

4.1 Digi Connect Wan 3G Status

Connections Management

Virtual Private Network (VPN) Connections

Action	Description	Remote Address	Local Address	Status
<input type="checkbox"/>	Transport	94.194.32.202	80.187.240.163	Connected

Refresh Disable

4.2 Digi Transport VC7400 Status

Management - Connections > Virtual Private Networking (VPN) > IPsec > IPsec Tunnels > IPsec Tunnels 0 - 9 > IPsec Tunnels 0 - 9

- IP Connections
- PPP Connections
- Virtual Private Networking (VPN)
 - IPsec
 - IPsec Tunnels
 - IPsec Tunnels 0 - 9
 - Outbound V1 SAs

SPI	Eroute	Peer IP	Rem. selector	Loc. selector	AH	ESP Auth	ESP Enc	IPCOMP	KBytes Delivered	KBytes Left	Time Left	Interface
cd5b0baf	0	80.187.240.163	10.100.1.0/24	192.168.252.0/24	N/A	MD5	AES (256)	N/A	0	0	23576	ETH 5

Remove All

SPI	Eroute	Peer IP	Rem. selector	Loc. selector	AH	ESP Auth	ESP Enc	IPCOMP	KBytes Delivered	KBytes Left	Time Left	Interface
8c2c64d5	0	80.187.240.163	10.100.1.0/24	192.168.252.0/24	N/A	MD5	AES (256)	N/A	0	0	23576	ETH 5

Remove All

Refresh



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4.3 Transport Debug Settings

Management - Analyser > Settings

▼ Settings

Enable Analyser

Maximum packet capture size: bytes

Log size: Kbytes

Protocol layers

Layer 1 (Physical)

Layer 2 (Link)

Layer 3 (Network)

XOT

Enable IKE debug