## Application Note: 2 Peers to one Dual-Wan TrustGate

#### 

This document guides you through the set up of two PEER/Tunnels between two TrustGate appliances. The only prerequisite is that one of the TrustGate appliances has 2 WAN interfaces (Dual-Wan), and with two Public IP addresses.

The document consists of standard instructions that may not fit your particular solution. Please visit our support website for information on the latest revisions of documentation and firmware.

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## 1. Introduction

In this example a TrustGate160 (TG160) will be set up to have 2 tunnels to the same remote TrustGate (TG260). Tunnel WAN1 will terminate on WAN1 on the TG260 and Tunnel WAN2 will terminate on WAN2 in the TG260.

**Why so:** In some cases it is necessary to allocate ex. WAN2 only for VoIP traffic to an internal voice server (PBX) and not affecting the WAN1 connection.

**The technique:** To be able to have 2 tunnels between the 2 TrustGates it is necessary for the TG260 to differentiate between the two tunnels that are actually coming from the same remote appliance (TG160). This is where we will be using different ID Types for each tunnel; domain Name for the first tunnel and IP address for the second tunnel.

**Tunnel and PEERs:** Tunnel is not just a tunnel. In this document a Tunnel consist of a PEER and a tunnel. A PEER can have multiple tunnels. This part of the technique is not handled in this document. In our case a Tunnel is represented by one PEER and one tunnel.



#### Settings:

TrustGate160

> WAN1 = 140.1.1.11

TrustGate260

- ➢ WAN = 140.2.1.20
- ➢ WAN2 = 141.2.1.2

# 2. How to set up TrustGate with 2 PEERs/Tunnels to the same TrustGate.

In the following we will show who to set up 2 PEERs to the same remote site. The first PEER will use ID Type = Domain Name and the other will be using ID Type = IP Address.



### 2.1. TrustGate160 configuration (Single WAN site)

TG160 Top >> Top >> Refresh Interface Statistics													
Interf	ace IP Address	MAC Address	Link Status	bps	Bytes	Packets							
LAN	192.168.0.1	00:00:24:C8:DA:34	100 Mbps FDX	352 13	5,883 210	63 5	Rx Tx						
WAI	N 140.1.1.11	00:00:24:C8:DA:35	100 Mbps FDX	162 126	102,491 269,218	513 527	Rx Tx						
WAN	2 0.0.0.0	00:00:24:C8:DA:36	100 Mbps FDX	20 0	256 1,368	4 4	Rx Tx						
DMZ	192.168.1.1	00:00:24:C8:DA:37	100 Mbps FDX	40 0	512 42	8	Rx Tx						

WAN on the TrustGate160.

	VPN P	eers		
	Using 2 of 100 p	peers (98 free)		
	Save	New		
Disable	Peer Name (Remote ID)	Public IP Address	Dynamic DNS	Comment
	140.2.1.20	140.2.1.20		Ū 🖻 📃
0.	TG260	141.2.1.2		Û 💕
				2

First PEER is using IP address as ID and also Pre-Shared key.

> 140.2.1.20 = WAN1 on TG260

Second PEER is using Domain Name as ID and Pre-Loaded Certificate.

> 141.2.1.2 = WAN2 on TG260



Advan	Advanced Properties for 140.2.1.20 🖹 🗐								
	Using Pre-Shared Key								
	Pre-S	Shared Key:							
Hex 💙 12345678									
	IPSec	Parameters:							
ID Type:	(	IP Address		<b>~</b>					
Encryption	Algorithm:	Use General S	etting 💌						
Hash Algo	orithm:	Use General S	etting 💌						
Diffie-Hel	lman Group:	Use General S	etting 💌						
Perfect Fo	orward Secrecy:	Use General S	etting 🔽						
	Misc	ellaneous:							
Backup IP Address	s or DNS Name	141.2.1.2							
Peer Is Always Ini	tiator:	No 💙							
Bind To Interface:		Any 💙							
	Save	Cancel							

PEER1 on TG160 [1] (IP address)

Configure a Pre-Shared key.

Configure ID Type = IP address

Backup IP address or DNS Name = WAN2 IP address on TG260. (Specifying the second WAN interface on the TG260 here, will make the tunnel failover to use WAN2 of this tunnel if WAN1 goes down.)



2 Using Pre-L	oaded Certificate
IPSec	Parameters:
ID Type:	Domain Name
Encryption Algorithm:	Use General Setting 💙
Hash Algorithm:	Use General Setting 🔽
Diffie-Hellman Group:	Use General Setting 🔽
Perfect Forward Secrecy:	Use General Setting 🔽
Misc ackup IP Address or DNS Name:	ellaneous:
eer Is Always Initiator:	No

PEER2 on TG160 [2] (Domain Name)

Configure ID Type = Domain Name

Paste in the certificate from TG260 using the  $\blacksquare$  icon.

**NOTE:** The certificate is the Local Certificate from the TG260. Go to the TG260 WEB GUI and select the menu: Certificate > Local > Copy

Backup IP address or DNS Name = WAN1 IP address on TG260. (Specifying the first WAN interface on the TG260 here will make the tunnel failover to use WAN1 of this tunnel if WAN2 goes down.)

**Tunnel Configuration:** 

VPN Tunnels												
Using 2 of 2000 tunnels (1998 free)												
				Save	New List Rem	ote						
Disable	Peer		Local Network	Local Subnet Mask	Remote Network	Remote Subnet Mask	Compress	Comment				
	140.2.1.20	0	192.168.0.0	255.255.255.0	172.16.5.0	255.255.255.0		<i>s</i>				
	TG260	0	192.168.0.0	255.255.255.0	10.0.0.0	255.255.255.0		<i>s</i>				
2												

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Create corresponding tunnels for each PEER. In this case the (2) Tunnel is destination DMZ interface on the TG260 appliance.

## 2.2. TrustGate260 – DualWAN Appliance

TG260 ARP >> Top >> Refresh Interface Statistics											
Interface	IP Address	MAC Address	Link Status	bps	Bytes	Packets					
LAN	172.16.5.1	00:00:24:CB:5F:A4	100 Mbps FDX	0	9,280 42	145 1	Rx Tx				
WAN	140.2.1.20	00:00:24:CB:5F:A5	100 Mbps FDX	1,281 3,443	342,987 300,251	4,958 2,488	Rx Tx				
WAN2	141.2.1.2	00:00:24:CB:5F:A6	100 Mbps FDX	57 40	85,372 55,246	1,393 1,251	Rx Tx				
DMZ	10.0.0.1	00:00:24:CB:5F:A7	100 Mbps FDX	0	49,116 3,222	517 35	Rx Tx				

VPN Peers												
Using 2 peers and 3 EasyTunnels of 600 peers (595 free)												
	Save	New		3								
Disable	Peer Name (Remote ID)	Public IP Address	Dynamic DNS	Comment								
	140.1.1.11	140.1.1.11		ũ 🖻								
🗌 🚯	TG160	140.1.1.11		Û 🗳 🔤								
				4								

First PEER is using IP address as ID and also Pre-Shared key.

Second PEER is using Domain Name ID and Pre-Loaded Certificate.





Advanced Propert	ies for 140.1.1.11) 🖺 🖼										
Using Pre-Shared Key											
Pre-5	Shared Key:										
Hex ¥ 12345678											
IPSec	Parameters:										
(											
ID Type:	IP Address										
Encryption Algorithm:	Use General Setting 🔽										
Hash Algorithm:	Use General Setting 💌										
Diffie-Hellman Group:	Use General Setting 💌										
Perfect Forward Secrecy:	Use General Setting 💙										
Miss	-ellaneous:										
	-enaneous.										
Backup IP Address or DNS Name	•										
Peer Is Always Initiator:	No 💌										
Bind To Interface:	WAN M										
Save	Cancel										

PEER1 on TG260 [3] (IP address)

Configure a Pre-Shared key.

Configure ID Type = IP address

Bind To Interface = WAN (to make sure that TG260 will use WAN(1) in case it is the TG260 appliance that starts the tunnel).





Advanced Prope	rties for TG160 🖺 🖼												
Using Pre-Loaded Certificate													
IPSec Parameters:													
ID Type:	Domain Name												
Encryption Algorithm:	Use General Setting 💙												
Hash Algorithm:	Use General Setting 💌												
Diffie-Hellman Group:	Use General Setting 💌												
Perfect Forward Secrecy:	Use General Setting 💌												
Misc	ellaneous:												
Backup IP Address or DNS Name:													
Peer Is Always Initiator:	No 💌												
Bind To Interface:	WAN2												
Save	Cancel												

PEER2 on TG260 [4] (Domain Name)

Configure ID Type = Domain Name

Paste in the certificate from TG160 using the  $\blacksquare$  icon.

**NOTE:** The certificate is the Local Certificate from the TG160. Go to the TG160 WEB GUI and select the menu: Certificate > Local > Copy

Bind To Interface = WAN2 (to make sure that TG260 will use WAN2 in case it is the TG260 appliance that starts the tunnel).

			VPN	I Tunnels							
Using 2 of 10000 tunnels (9998 free)											
			Save	New List Rem	ote						
Disable Pee	r	Local Network	Local Subnet Mask	Remote Network	Remote Subnet Mask	Compress	Comment				
140.1.1	1.11 🕤	172.16.5.0	255.255.255.0	192.168.0.0	255.255.255.0		1 No. 1				
TG160	0	10.0.0.0	255.255.255.0	192.168.0.0	255.255.255.0		<i>§</i> 0				
4											

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Configure the 2 tunnels for each peer according to your set up

#### 2.3. Result

TG160				St	anda	rd Tunne	ls							
Peer	Interface	Status	Local Network	Remote Network	Algo	Age	Idle	Local LB	Remote LE	Comp.	Bytes	Packets		
Q <u>140.2.1.20</u>	WAN	Up	192.168.0.0/24	172.16.5.0/24	AES	00:02:09	00:00:18			of	f 304 480	4 4	Rx Tx	S
TG260 141.2.1.2	WAN	Up	192.168.0.0/24	10.0.0/24	AES	00:02:27	00:00:00			of	3,674,471 399,192	6,183 3,403	Rx Tx	S
TrustGate	TrustGate160													
IG26	50			St	anda	rd Tunne	ls							
Peer	Interface	Status	Local Network	Remote Network	Algo.	Age	Idle	Local LB	Remote LB	Comp.	Bytes	Packets		
Q <u>140.1.1.11</u>	WAN	Up	172.16.5.0/24	192.168.0.0/24	AES	00:05:14	00:00:22 00:00:22			off	760 1,200	10 10	Rx Tx	S
C TG160 140.1.1.11	WAN2	Up	10.0.0.0/24	192.168.0.0/24	AES	00:03:21	00:00:00			off	2,349,318 49,025,240	37,567 75,703	Rx Tx	S

TrustGate260 (DualWAN)

## 3. Pending tasks

To make Tunnels fallback to the primary interface you must set the rekey time to e.g. 30 minutes. Do not set the value lower then 10 minutes or the tunnel might go down before a new soft-state is ready.

	VPN General
EasyTunnel Mode:	Disabled 💌
SoftClient Deployment Port:	
Custom SoftClient (x86) CAB URL:	
Custom SoftClient (x64) CAB URL:	
Default ID Type:	Domain Name
Specific ID (IP Address):	0.0.0.0
Default Encryption Algorithm:	Any Y
Default Hash Algorithm:	Any 🕶
Default Diffie-Hellman Group:	Any
Default Perfect Forward Secrecy:	On 💌
ISAKMP SA Lifetime:	30 minutes [1-1440]
IPSec SA Lifetime:	30 minutes [1-1440]
Keying Tries:	Infinite 💌
Virtual Address Assignment:	Use LAN Address 🔽
Manual Address:	192.168.0.1
VPN Router:	0.0.0.0
NAT-Traversal:	Enabled V
NAT-T Keep Alive:	Auto 💌
NAT-T Keep Alive Interval:	20 seconds [1-300]
NAT-T Port Floating:	Enabled 💌
Tunnel MTU Mode:	Auto 💙
Tunnel MTU:	1422 bytes
ECN Usage:	Forbid Y
- DiffServ Domain Model:	



## 4. Notices

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