



## SONICWALL VE VIGOR ROUTER ARASINDA IPSEC VPN

Bu makale, SonicWALL NSA250 ve Vigor Router arasında Site-to-Site IPsec VPN'in nasıl yapılandırıldığını göstermektedir.

- 1. Network >> Address Objects'e gidin ve Add'e tıklayın.
  - Zone Assignment için "VPN" seçeneğini seçin. •
  - Type için "Network" ü seçin. •
  - Network and Netmask/Prefix Length'de Vigor Router'ın LAN IP'sini ve Mask'ını girin. •

🕶 🧟 Network			jahuat Casuitu Applianaa	i
Interfaces		SonicWALL N	etwork Security Appliance	-
PortShield Groups				
Failover & LB		Name:	VigorLAN	
Zones		Zone Assignment:	VPN ~	
DNS		Type'	Network ×	
Address Objects		Type.		
Services		Network:	192.168.1.0	!
Routing		Netmask/Prefix Length:	255.255.255.0	
NAT Policies		_		
ARP		Ready	2	
Neighbor Discovery		_	OK Cancel	
MAC-IP Anti-spoof			2	!
DHCP Server				(
IP Helper				
Web Proxy	-	Add	Delete Refresh	

- 2. VPN >> Settings'e gidin ve Add'e tıklayın. General sekmesinde,
  - Policy Type için "Site to Site" seçeneğini seçin. •
  - IPsec Primary Gateway Name or Address' de Vigor router'un WAN IP'sini ya da domain adını girin. •
  - Bir Shared Secret girin.

► Sor VoIP ► Conti-Spam	2 WLAT	SonicWALL   Network S	Security Appliance	Advanced	ā
Settings Advanced	Add	Security Policy			
Human Keu     DHCP over VPN     L2TP Server     SSL VPN     SSL VPN     See     Users     High Availability     Security Services     MAN Acceleration	Site To Site Policie GroupVPN Policies Currently Active # Create 1 05/12	Policy Type: Authentication Method: Name: IPsec Primary Gateway Nam IPsec Secondary Gateway Na	e or Address: ame or Address:	Site to Sit IKE using IPsec vigor.vpnc	e  V Preshared Secret
AppFlow     Log	1 Currently Active 1	IKE Authentication Shared Secret: Confirm Shared Secret: Local IKE ID: Peer IKE ID:	IPv4 Address	>	Mask Shared Secret





3. Network sekmesine gidin,

- Local Networks'de Sonicwall'un LAN'ının adres objesini seçin.
- **Remote Networks**'de Vigor Router'ın LAN'ının adres objesini seçin.

General	Network	Proposals	Advanced		
ocal Networks					
Ochoose local no	etwork from list		191VLAN	~	
Any address					
Remote Networ	ks				
~					
O Use this VPN T	unnel as default ro	ute for all Internet tra	ffic		
Choose destination	tion network from	list	VigorLAN	~	
O Use IKEv2 IP P	loool		Select IP Pool Network	$\sim$	

- 4. Proposal sekmesine gidin,
  - **Exchange** için "Main Mode" seçeneğini seçin.
  - IKE Phase 1 ve Phase 2 proposallarını seçin. Vigor Router yapılandırmasıyla aynı olacağını unutmayın.

General Network F	Proposals Advanced	
IKE (Phase 1) Proposal		
Exchange:	Main Mode	
DH Group:	Group 2	
Encryption:	AES-256	
Authentication:	SHA1	
Life Time (seconds):	28800	
IPsec (Phase 2) Proposal		
Protocol:	ESP	
Encryption:	AES-256	
Authentication:	SHA1	
Enable Perfect Forward Secrecy		
Life Time (seconds):	3600	





# DrayOS

- 1. VPN and Remote Access >> LAN to LAN sayfasına gidin ve profili ayarlamak için boş bir index numarasına tıklayın. Common Settings'de,
  - Profil adı girin.
  - Enable this profile'1 etkinleştirin.
  - Call Direction için "Dial-Out" seçeneğini seçin.

### VPN and Remote Access >> LAN to LAN

Profi	e	Ind	ex	:	1

1. Common Settings	
Profile Name IPsec	Call Direction OBoth ODial-Out Dial-in Always on
VPN Dial-Out Through WAN1 First	Idle Timeout     0     second(s)       Enable PING to keep IPsec tunnel alive
Netbios Naming Packet  Pass Block Multicast via VPN Pass Block (for some IGMP,IP-Camera,DHCP Relayetc.)	)

- 2. Dial-out settings'de,
  - Type of Server I am Calling için "IPsec Tunnel" seçeneğini seçin.
  - Server IP'de SonicWALL'un WAN IP'sini girin.
  - SonicWALL'da girilen Shared Secret değerini **Pre-shared Key**'e girin.
  - **IPsec Security Method**'da "High(ESP) AES with Authentication" 1 seçin.

#### 2. Dial-Out Settings

Type of Server I am calling	Username ???
O PPTP	Password(Max 15 char)
IPsec Tunnel	PPP Authentication
L2TP with IPsec Policy None 🔻	PAP/CHAP/MS-CHAP/MS-CHAPv2 V
SSL Tunnel	VJ Compression   On Off
Server ID/Heat Name for VDN	IKE Authentication Method
(such as draytek.com or 123.45.67.89)	Pre-Shared Key
sonicwall.vpnserver.net	IKE Pre-Shared Key
Server Port (for SSL Tunnel): 443	Digital Signature(X.509)
	Peer ID None 🔻
	Local ID
	Iternative Subject Name First
	Subject Name First
	Local Certificate None 🔻
	IPsec Security Method
	Medium(AH)
	High(ESP) AES with Authentication
	Advanced
	Index(1.15) in Cohedula Cohum
	index(1-15) in <u>Schedule</u> Setup:





3. Advanced at IPsec Security Method'u tıklayın. IKE advanced settings'de SonicWALL yapılandırmasında girilen IKE phase 1 ve phase 2 proposal değerlerini seçin. Ardından kaydetmek için OK'a tıklayın.

KE phase 1 mode	Main mode		Aggressive mode	
<e 1="" phase="" proposal<="" td=""><td>AES256_SHA1_G2</td><td>2 🔻</td><td></td><td></td></e>	AES256_SHA1_G2	2 🔻		
(E phase 2 proposal	AES256_SHA1	•		
E phase 1 key lifetime	28800	(900 ~ 86400)		
E phase 2 key lifetime	3600	(600 ~ 86400)		
erfect Forward Secret	Disable		Enable	
ocal ID				
ote: If you select "Auto" in IKE phase iclude: DES_(MD5/SHA)_G1, 3DES_ ES256_SHA_G14	e 1 proposal, the router will se MD5_G1, 3DES_MD5_G2, 3DE	nd the following pr S_(MD5/SHA)_G5,	oposals to negotiate with the remote site. The AES128_MD5_(G2/G5), AES256_SHA_(G2/G	e proposals 55),

4. TCP/IP Network Settings'de **Remote Network IP**'de Sonicwall Router'ın LAN IP'sini girin. Ardından kaydetmek için **OK**'a tıklayın.

5. TCP/IP Network Setting	5	
My WAN IP	0.0.0.0	RIP Direction Disable V
Remote Gateway IP	0.0.0.0	From first subnet to remote network, you have to
Remote Network IP	10.225.191.0	do Route
Remote Network Mask	255.255.255.0	IPsec VPN with the Same Subnets
Local Network IP	192.168.1.1	
Local Network Mask	255.255.255.0	Change default route to this VPN tunnel ( Only
	More	single WAN supports this )
	ОК	Clear Cancel

5. VPN'i başarılı olup olmadığını görmek için VPN and Remote Access >> Connection Management sayfasına gidin yeni oluşturulan VPN profilini seçin ve Dial'e tıklayın.

VPN and Remote	Access >> Connection Manager	nent	
Dial-out Tool		R	efresh Seconds : 10 🔻 Refresh
	General Mode: ( IPsec )	41.161.51.90	▼ Dial
	Backup Mode:		▼ Dial
	Load Balance Mode:		▼ Dial

6. VPN başarıyla bağlandığında VPN durumunu göreceğiz.

VPN Conr	nection Status								
Current F	Page: 1						Page No.	Go	>>
VPN	Туре	Remote IP	Virtual Network	Tx Pkts	Tx Rate(Bps)	Rx Pkts	Rx Rate(Bps)	UpTime	
1 (IPsec)	IPsec Tunnel AES-SHA1 Auth	41.161.95.90 via WAN1	10.225.191.0/24	4	7	4	7	0:0:31	Drop
					XXXXXXXX	: Dat	a is encryp	ted.	

xxxxxxxx : Data isn't encrypted.





### Linux

- 1. VPN and Remote Access >> VPN profiles >> IPsec sayfasına gidin ve profil ekleyin. Basic sekmesinde,
  - Profil adı girin.
  - Enable'yi işaretleyin.
  - Local IP and Subnet Mask için Vigor39002ün LAN Subnet'ini girin.
  - Remote Host'da SonicWALL'un WAN IP'sini veya domain adını girin.
  - Local IP ve Subnet Mask SonicWALL'un LAN Subnet'ini girin.
  - Preshared Key girin.

V Enable		
Basic Advanced	GRE Proposal	
Auto Dial-Out :	⊖Enable	
For Remote Dial-In User :	O Enable      O Disable	
Dial-Out Through :	wan2 v (	Default WAN IP OWAN Alias IP
Failover to :	~	
Local IP / Subnet Mask :	192.168.32.1 25	55.255.255.0/24 👻
Local Next Hop :	0.0.0.0 (0.0.	0.0 : default gateway)
Remote Host :	sonicwall.vpnserver.nef	
Remote IP / Subnet Mask :	10.225.191.0 25	55.255.255.0/24 🗸
	🏠 Add 💾 Save	
	IP	Subnet Mask
More Remote Subnet :		No items to show.
	● Main Mode ○ Aggressive	Mode
IKE Phase 1 :		
IKE Phase 1 : Auth Type :	PSK v	
IKE Phase 1 : Auth Type : Preshared Key :	PSK v (If	Aggressive mode is disabled and Remote Host IP is (

- 2. Proposal sekmesine gidin,
  - SonicWALL'da yapılandırılan IKE Phase 1 ve Phase 2 proposallarını seçin.
  - Ayarları kaydetmek için **Apply**'a tıklayın.





Profile :	vigor				
Enable					
Basic	Advanced	GRE	Proposal		
IKE Phase1 Proposal [Dial-Out] :			AES256 G2	*	
IKE Phase1 Authentication [Dial-Out] :			ALL	~	
IKE Phase2 Proposal [Dial-Out] :			AES256 with auth	~	
IKE Phase	2 Authentication	[Dial-Out] :	ALL	~	
Accepted	Proposal [Dial-Ir	1]:	acceptall	*	

1. VPN'i başarılı olup olmadığını görmek için **VPN and Remote Access >> Connection Management** sayfasına gidin yeni oluşturulan VPN profili için **Connect**'e tıklayın.

PN and Remote Access >> Connection Management >> Co	onnection Management	
Connection Management History		
Dial-Out tool		
IPsec OPPTP OSL Profiles: vigor	💌 🚭 Connect 🗳 Refresh Auto Refresh : 1 Minute	V Green :Data is er White :Data isn't
4	m	

2. VPN başarıyla bağlandığında VPN durumunu göreceğiz.

Cor	nnection Manage	ement History										
Dial	I-Out tool											
IPsec OPPTP OSSL Profiles :					Connect	C Refresh Auto Refresh		: 1 Minuto	~		Green :Deta in White :Data is	
4												
VPN	N Connection S	tatus										
-	Search	Search 🚳 Search 🧠 Search 🧐	100	30 : Search	Search	Search	% Search	Search	Search	co.		
	VPN	Туре	Interface	R.	Virtual Network	Up Time	RX Rate	TX Rate	RX Byte	TX Byte	Operatio	
1.5	NIGOT	IDeoc/AES HMAC SHA	5 1413192	41	10 225 101 0/2	4 00-03-34	236(bos)	760(bos)	226/Buto)	1000(Buto)	VE	