

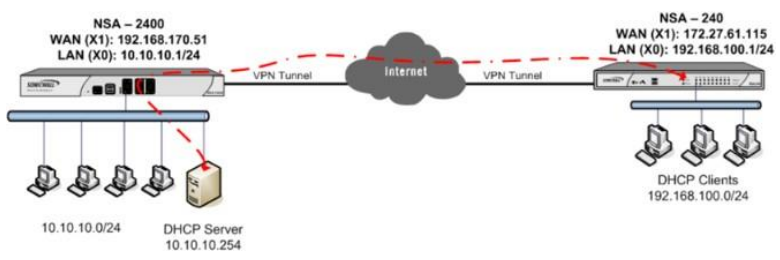


**VPN: Using IP Helper to obtain
DHCP over a Policy-based Site
to Site VPN Tunnel**

**KNOWLEDGE
DATABASE**

VPN: Using IP Helper to obtain DHCP over a Policy-based Site to Site VPN Tunnel

This article describes how to use the IP Helper feature to obtain dynamic IP addresses over a site to site VPN tunnel.



Site A SonicWall:

X1 Interface: 192.168.170.51
X0 Subnet: 10.10.10.0/24
X0 Interface IP: 10.10.10.1
DHCP Server: 10.10.10.254

Site B SonicWall:

X1 Interface: 172.27.16.115
X0 Subnet: 192.168.100.0/24
X0 Interface IP: 192.168.100.1

In this scenario, the hosts behind Site B are set to obtain IP addresses dynamically. The goal is to forward the DHCP requests from hosts behind Site B through the tunnel to the DHCP server behind Site A SonicWall. This configuration is different from the DHCP over VPN configuration in that Site A and Site B are to be on different subnets.

Note: The IP addresses used in this article are examples. Change it to the IP addresses used in your network.

Procedure:

VPN Global Settings

Enable VPN
 Unique Firewall Identifier: 0017C514FF9C

VPN Policies

#	Name	Gateway	Destinations	Crypto Suite	Enable	Configure
1	WAN GroupVPN			ESP: 3DES/HMAC SHA1 (IKE)	<input type="checkbox"/>	
2	WLAN GroupVPN			ESP: 3DES/HMAC SHA1 (IKE)	<input type="checkbox"/>	
3	To Remote Site	172.27.61.115	192.168.100.0 - 192.168.100.255	ESP: 3DES/HMAC SHA1 (IKE)	<input checked="" type="checkbox"/>	

Site To Site Policies: 1 Policies Defined, 1 Policies Enabled, 3000 Maximum Policies Allowed
 GroupVPN Policies: 2 Policies Defined, 0 Policies Enabled, 20 Maximum Policies Allowed

Currently Active VPN Tunnels

#	Created	Name	Local	Remote	Gateway	Actions
1	03/29/2012 05:54:57	To Remote Site	10.10.10.0 - 10.10.10.255	192.168.100.0 - 192.168.100.255	172.27.61.115	Renegotiate

VPN Global Settings

Enable VPN
 Unique Firewall Identifier: 0017C54FD44D

VPN Policies

#	Name	Gateway	Destinations	Crypto Suite	Enable	Configure
1	WAN GroupVPN			ESP: 3DES/HMAC SHA1 (IKE)	<input checked="" type="checkbox"/>	
2	WLAN GroupVPN			ESP: 3DES/HMAC SHA1 (IKE)	<input type="checkbox"/>	
3	To Central Site	192.168.170.51	10.10.10.0 - 10.10.10.255	ESP: 3DES/HMAC SHA1 (IKE)	<input checked="" type="checkbox"/>	

Site To Site Policies: 1 Policies Defined, 1 Policies Enabled, 15 Maximum Policies Allowed
 GroupVPN Policies: 2 Policies Defined, 1 Policies Enabled, 6 Maximum Policies Allowed

Currently Active VPN Tunnels

#	Created	Name	Local	Remote	Gateway	Actions
1	03/29/2012 18:23:22	To Central Site	192.168.100.0 - 192.168.100.255	10.10.10.0 - 10.10.10.255	192.168.170.51	Renegotiate

Create an IP Helper DHCP policy in Site B SonicWall to forward DHCP requests to the server behind Site A SonicWall:

- Login to the Site B SonicWall management GUI
- Navigate to the **Network > Address Objects** page.
- Create the following address object for the DHCP Server
 - Name: DHCP Server
 - Zone Assignment: VPN
 - Type: Host
 - IP Address: 10.10.10.254

SONICWALL® Network Security Appliance

Name:

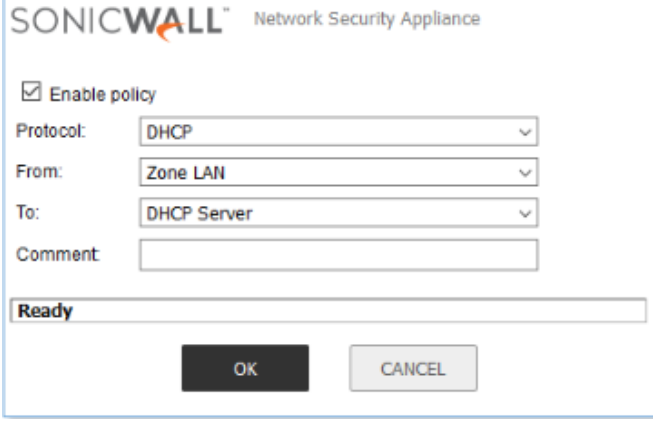
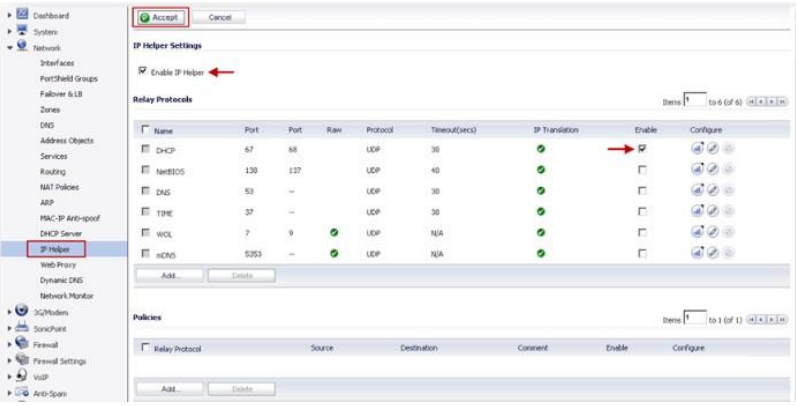
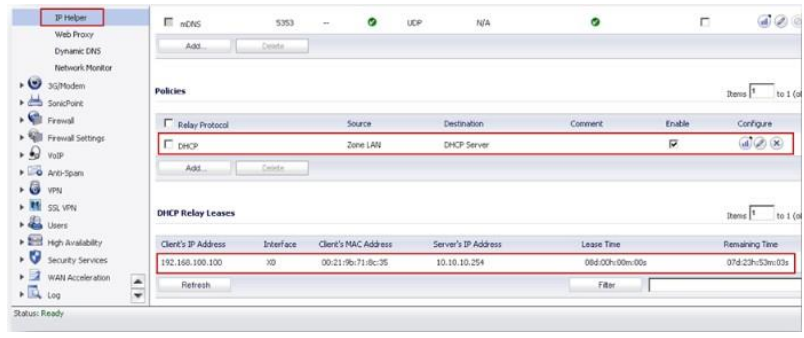
Zone Assignment:

Type:

IP Address:

Ready

- Navigate to the **Network > IP Helper** page.
- Enable check box **IP Helper** and click on **Accept** to save the changes.
- Enable check box **DHCP** under **Protocols**.
- Click on **Add** under **Policies** to create the following policy.
 - **Protocol** : DHCP
 - **From ZONE**: LAN
 - **To**: Select the address object of the DHCP server.
 - Click on **OK** to save.



From a host behind the Site B SonicWall do *ipconfig/release* and *ipconfig/renew*. Assuming the VPN tunnel is up, the host will be leased an IP address by the remote DHCP server. The IP Helper page will display the information under **DHCP Relay Leases**: