



**Configuring Site-to-Site VPN  
over OSPF using Command Line**

**KNOWLEDGE  
DATABASE**

## Configuring Site-to-Site VPN over OSPF using Command Line

**OBJECTIVE:** Configuring site-to-site VPN over OSPF. The routing protocols can you used carry the traffic across the VPN and will provide seem less inter connectivity from one site to another seamlessly.

### WHY SHOULD WE CONFIGURE SITE-TO-SITE VPN OVER OSPF?

OSPF over VPN is required if we are running OSPF inside our network and we need to extend the OSPF network to the other end of the site as well.

By configuring the OSPF over VPN dynamically the sites can be added to route the VPN traffic.

#### Procedure:

Provide detailed instructions; for example:

#### Step 1: VPN CONFIGURATION IN COMMAND-LINE:

SITE-A CONFIGURATION	SITE-B CONFIGURATION
<pre>vpn policy tunnel-interface SiteATOSiteB enable gateway primary 1.1.1.1  auth-method shared-secret shared-secret XXXXXXXXXXXXXXXXXXXX exit  proposal ike exchange main  proposal ike encryption triple-des proposal ike authentication sha1 proposal ike dh-group 2 proposal ike lifetime 28800  proposal ipsec protocol esp proposal ipsec encryption triple-des proposal ipsec authentication sha1 proposal ipsec dh-group none proposal ipsec lifetime 28800 keep-alive  bound-to interface X1 allow-advanced-routing no transport-mode exit</pre>	<pre>vpn policy tunnel-interface SiteBTOSiteA enable gateway primary 1.1.1.2  auth-method shared-secret shared-secret XXXXXXXXXXXXXXXXXXXX exit  proposal ike exchange main  proposal ike encryption triple-des proposal ike authentication sha1 proposal ike dh-group 2 proposal ike lifetime 28800  proposal ipsec protocol esp proposal ipsec encryption triple-des proposal ipsec authentication sha1 proposal ipsec dh-group none proposal ipsec lifetime 28800 keep-alive  bound-to interface X1 allow-advanced-routing no transport-mode exit</pre>

## Step 2: CONFIGURING OSPF OVER VPN:

SITE-A CONFIGURATION	SITE-B CONFIGURATION
<pre>router ospf ospf router-id 1.1.1.1 network 1.1.1.0/24 area 0 default-metric 10 ! end</pre>	<pre>router ospf ospf router-id 1.1.1.1 network 1.1.1.0/24 area 0 default-metric 10 ! end</pre>

## Step 3: VERIFICATION:

1. When configuring OSPF please make sure the MTU value is configured correctly on the interface or else the OSPF neighbor negotiation will be stuck in 2-way and the OSPF neighbor ship will never reach FULL state.
2. The MTU value can be ignored on the SonicWall by setting the **ip ospf mtu-ignore**.

SITE-A CONFIGURATION	SITE-B CONFIGURATION
<pre>interface Tl: SiteATOSiteB ip ospf network point-to-point  <b>ip ospf mtu 1500</b> <b>OR</b> <b>ip ospf mtu-ignore</b></pre>	<pre>interface Tl: SiteATOSiteB ip ospf network point-to-point  <b>ip ospf mtu 1500</b> <b>OR</b> <b>ip ospf mtu-ignore</b></pre>