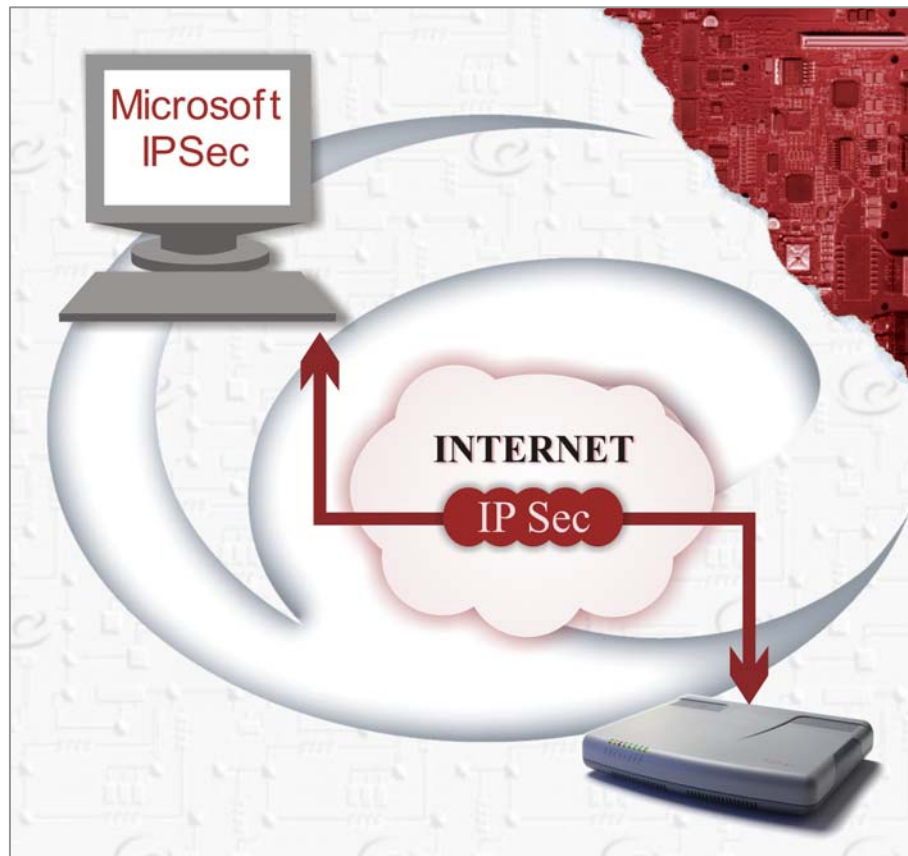# How to configure Quadro IPSec with MS IPSec

Abstract: This document describes the configuration settings for Quadro while creating VPN between Quadro and MS Windows 2000.

Table of Contents:

1 Introduction

This document describes the configuration settings for Quadro while creating VPN between Quadro and MS Windows 2000.

2 How to configure

2.1 Quadro IPSec ←→ MS IPSec

To configure IPSec on Quadro the follow the steps below:

1. Go to **Internet Uplink→VPN Configuration→IPSec Configuration** page.
2. Add a new connection.
3. Fill in the connection name and select **Windows 2000/XP** from the Peer type drop-down list and go to the next page of the wizard.

Figure 1

4. The basic parameters are already set on this page. Enter the peer's IP in the **Remote Gateway** IP Address field. MS peer should use 3DES/MD5 Keying type.

Figure 2

5. The same shared secret key must be used on both Quadro and MS peer sides. Also MS peer should have the same state of PFS (Perfect Forward Secrecy) as Quadro.
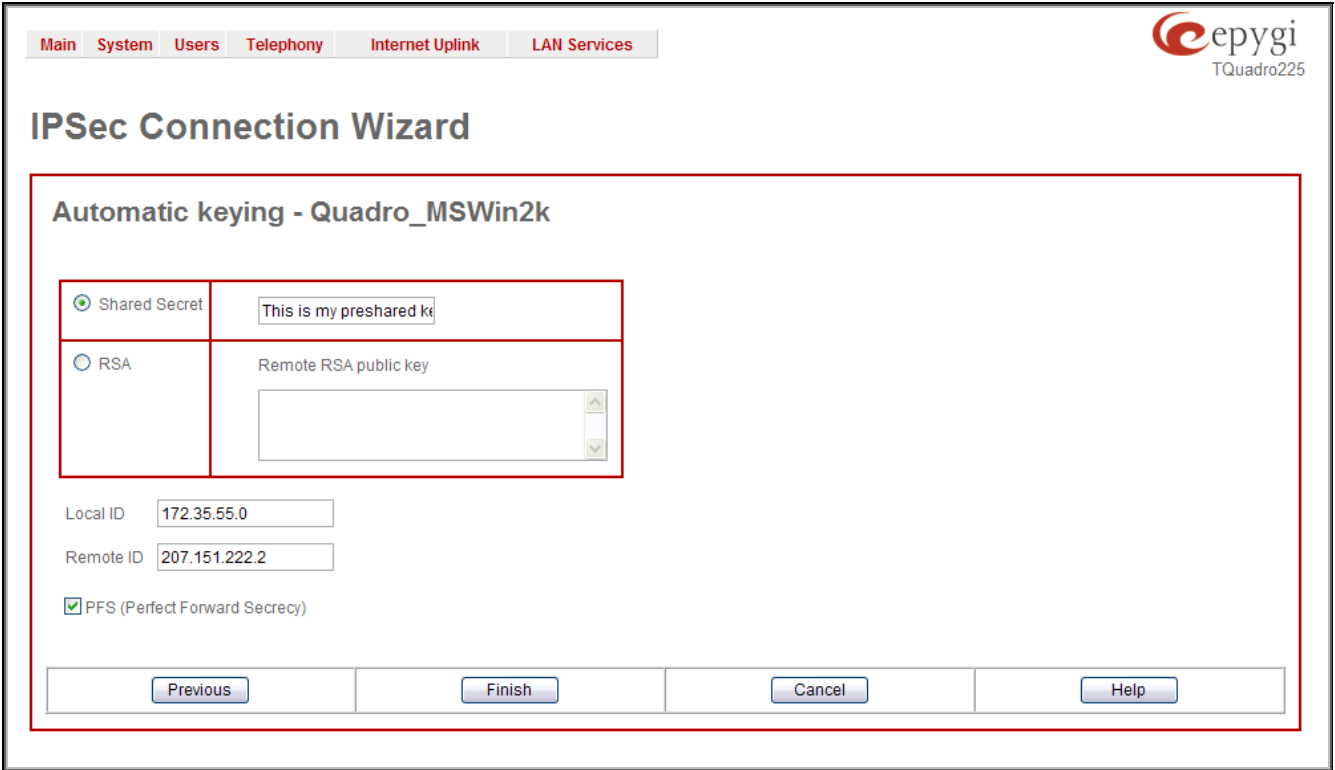

<div align="right">**Figure 3**</div>

6. Press **Finish** and **Start** connection.

7. Configure **MS peer** and enjoy connection.

2.2 The Windows 2000 IPSec setup

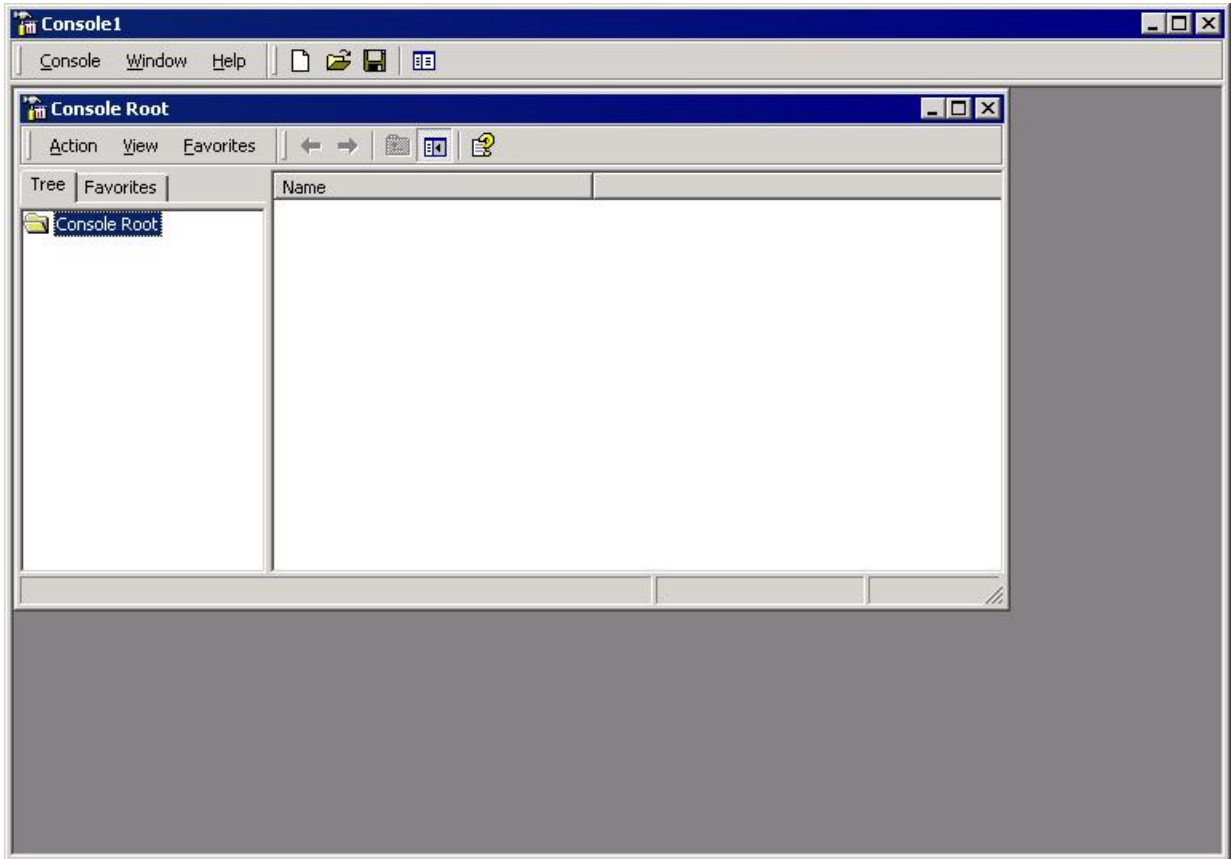1. Run MMC from **Start** –>**Run** window.

<div align="right">**Figure 4**</div>

2.   Go to **Console** –> **Add/Remove Snap-in**. Add **IP Security Policy Management**.
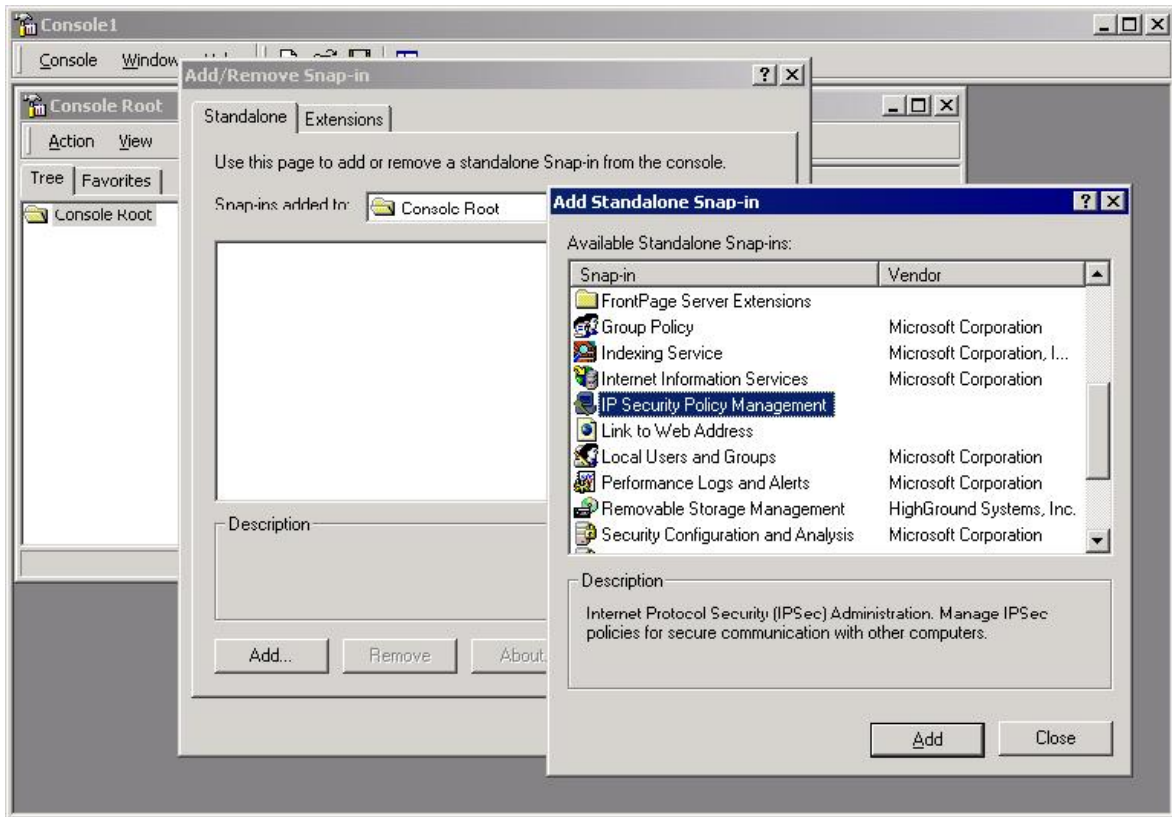

Figure 5

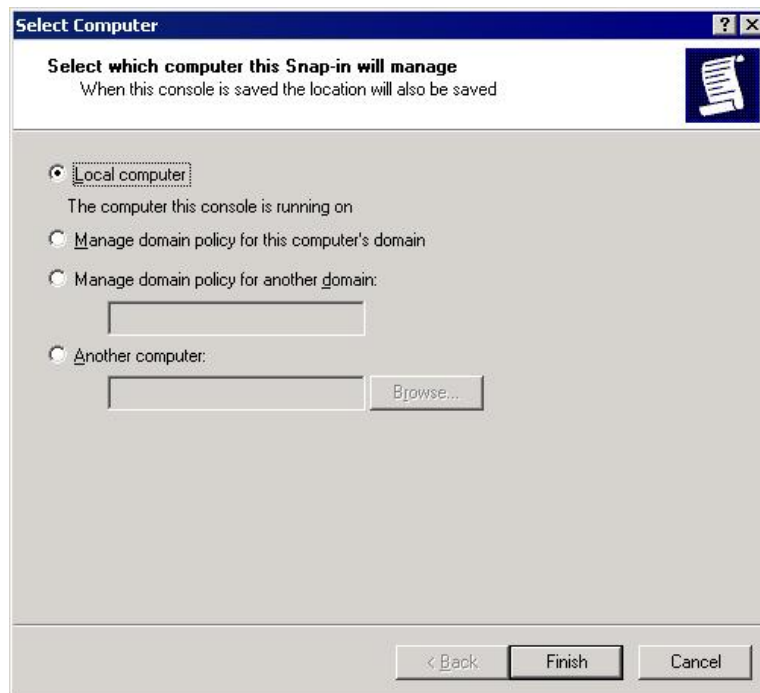3.   Choose **Local Computer** and press **Finish**.

Figure 6
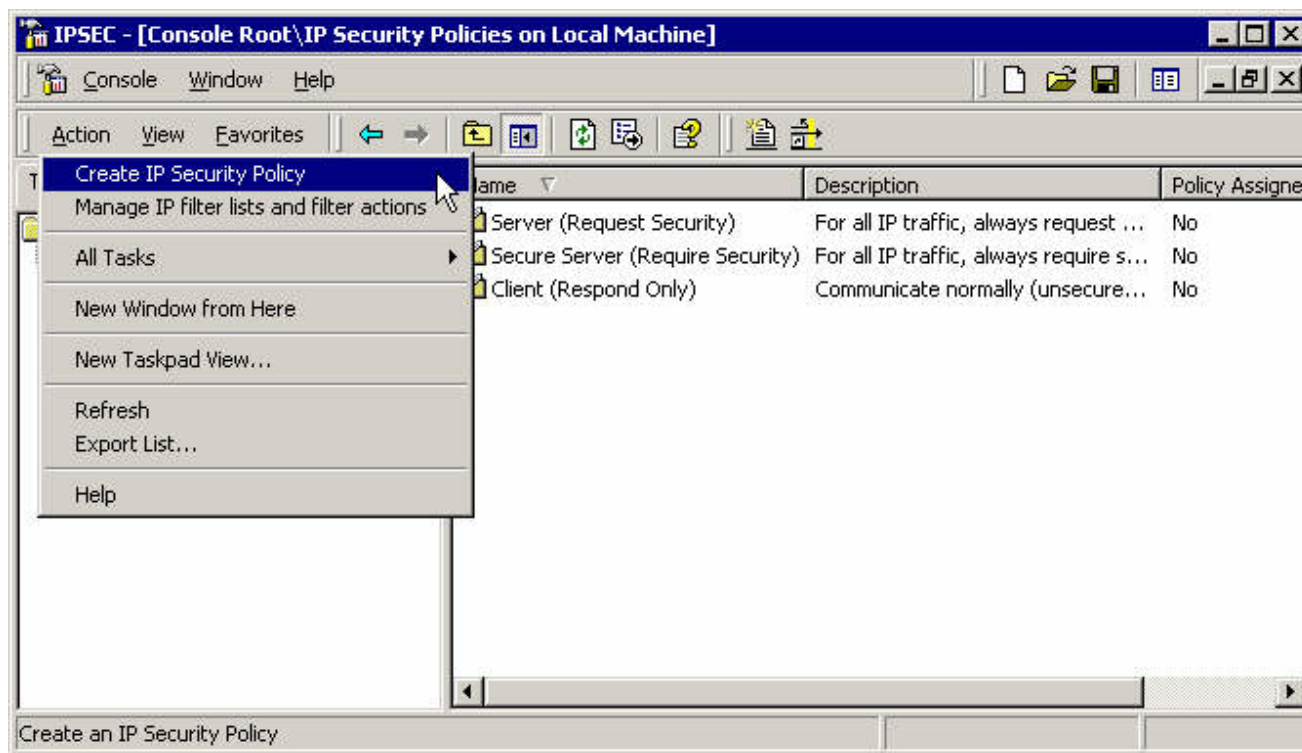
4. Create a new **IPSec Security Policy**.

<div align="right">**Figure 7**</div>

5. Press **Next**.

<div align="right">**Figure 8**</div>
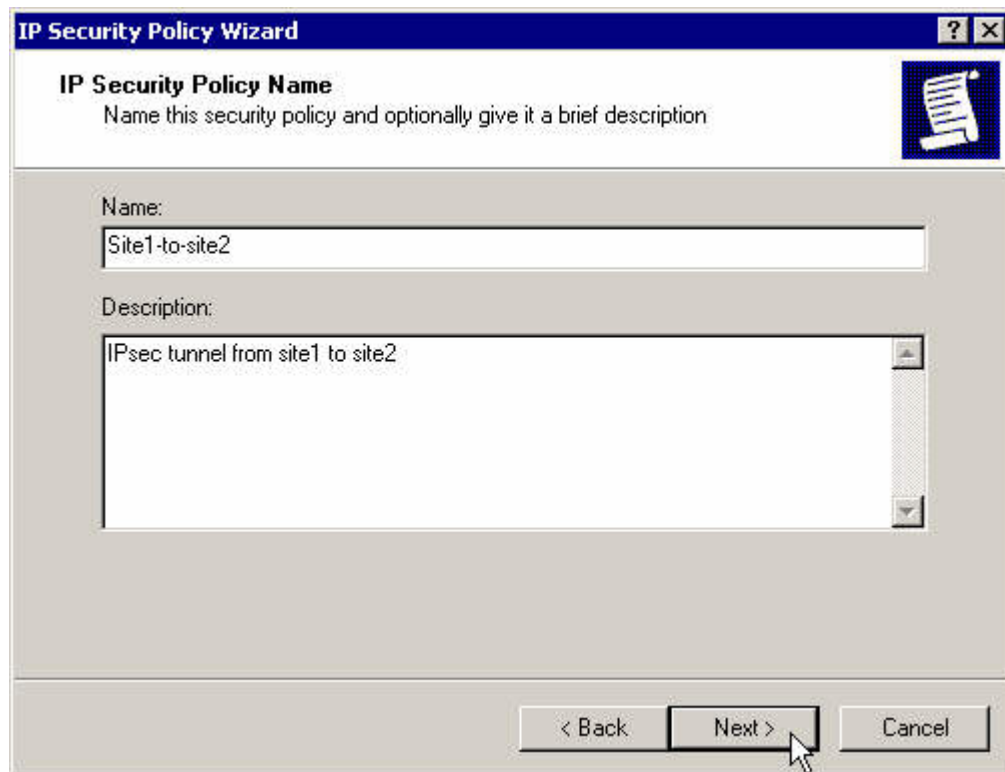
6. Enter a name for the new policy.

Figure 9

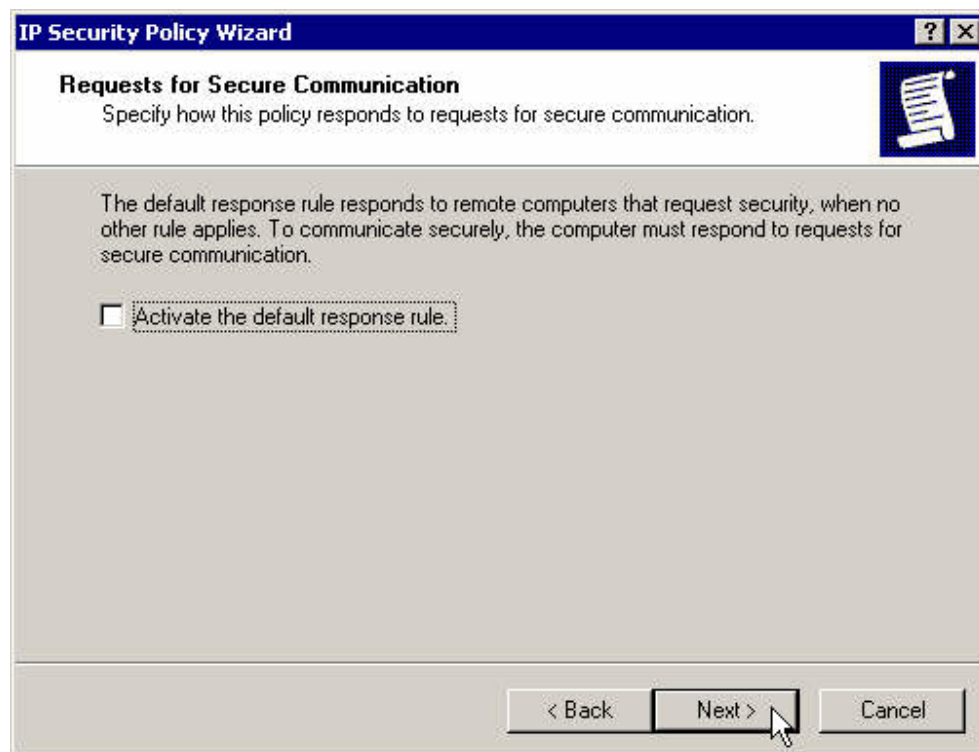**7.** Deactivate the default response rule and press **Next**.

Figure 10
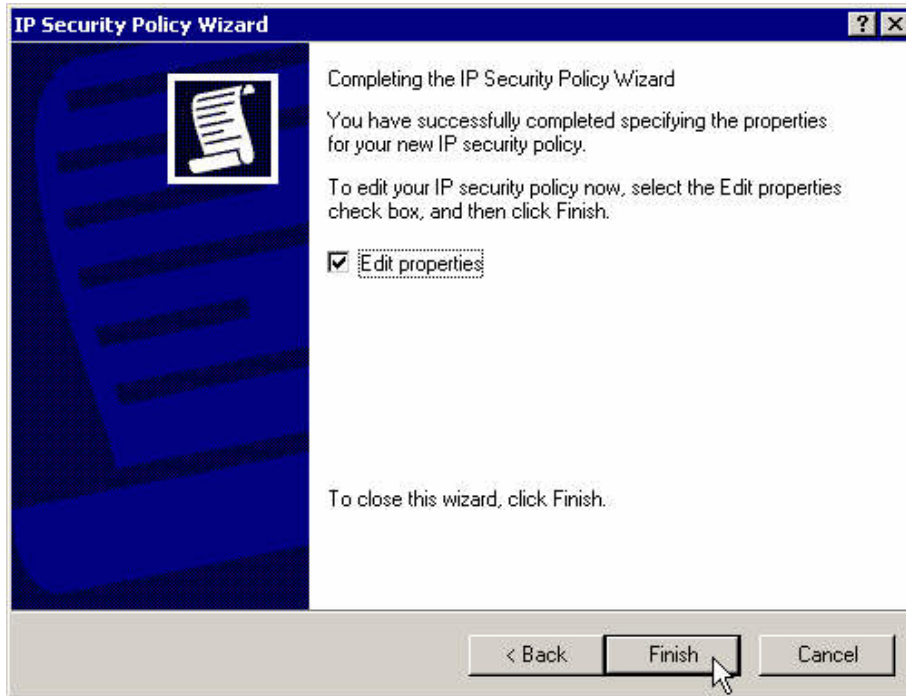
8. Click **Finish**.

Figure 11

9. Create the first IP filter for the traffic from the left subnet to the right subnet. Uncheck **Use Add Wizard** checkbox.
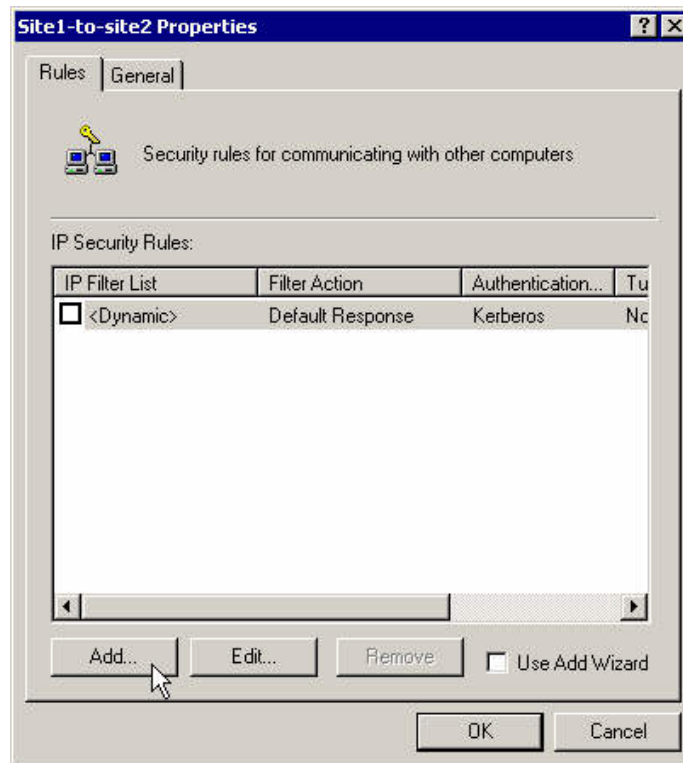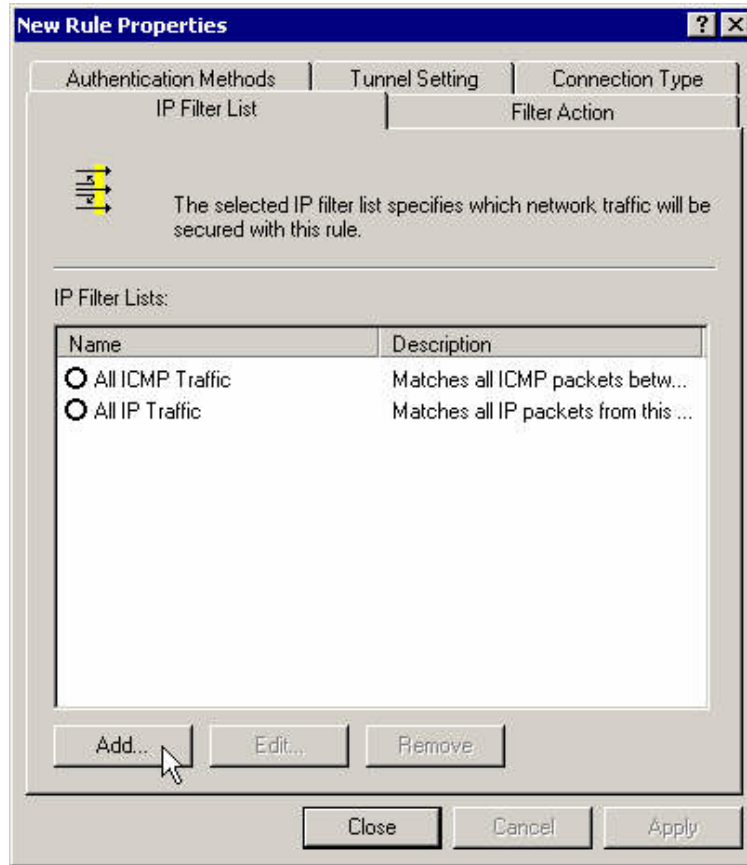
Figure 12

10. Press **Add**.

<div align="right">**Figure 13**</div>

11. Enter a name, description and add the filter.

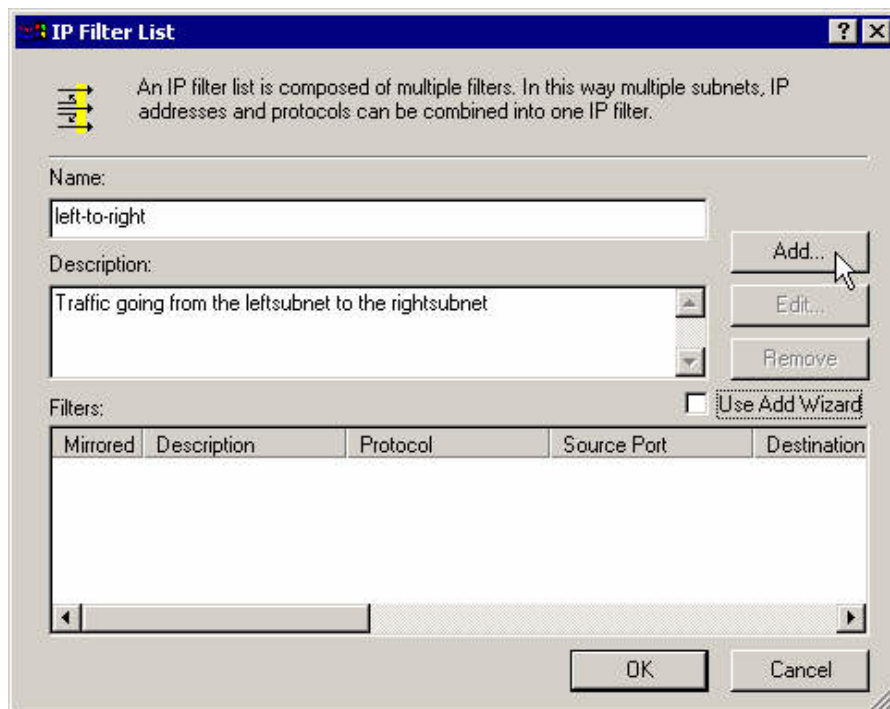<div align="right">**Figure 14**</div>

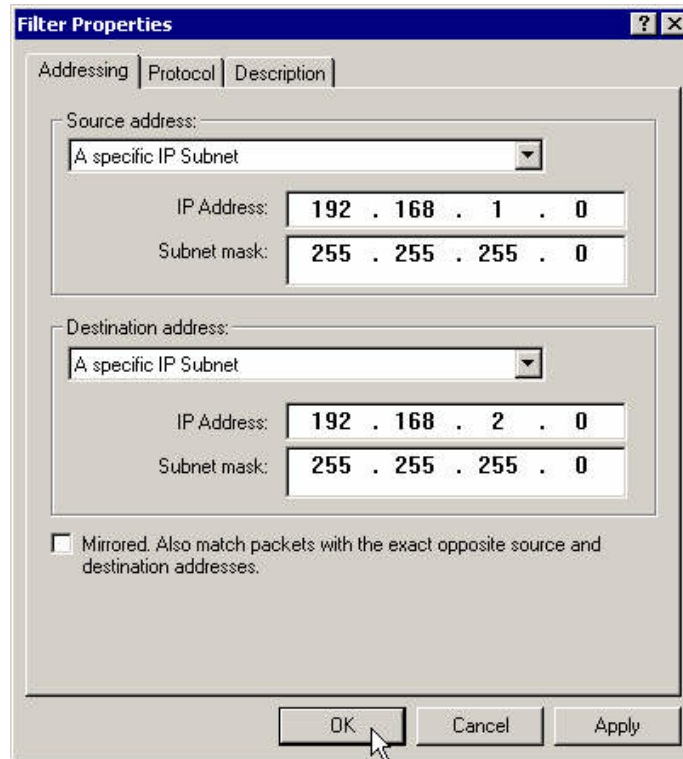**12.** Enter the left subnet as the source address and the right subnet as the destination address.

<p align="right">**Figure 15**</p>
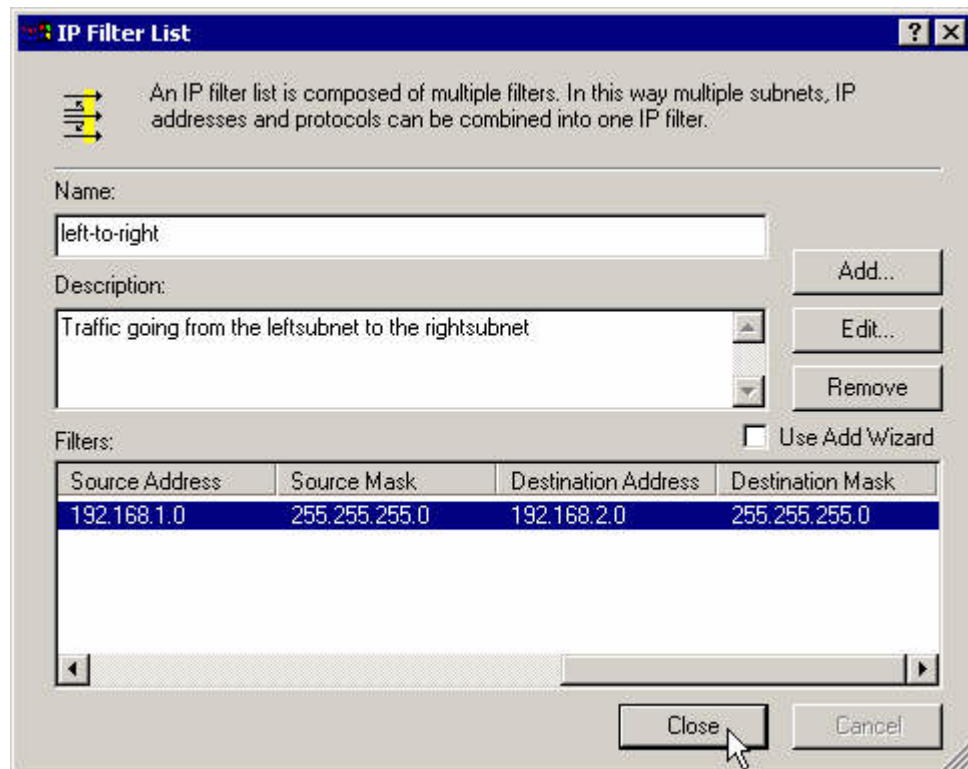
13. Close that filter's properties box.

<p align="right">**Figure 16**</p>

14. Assign the newly created filter to the current rule.
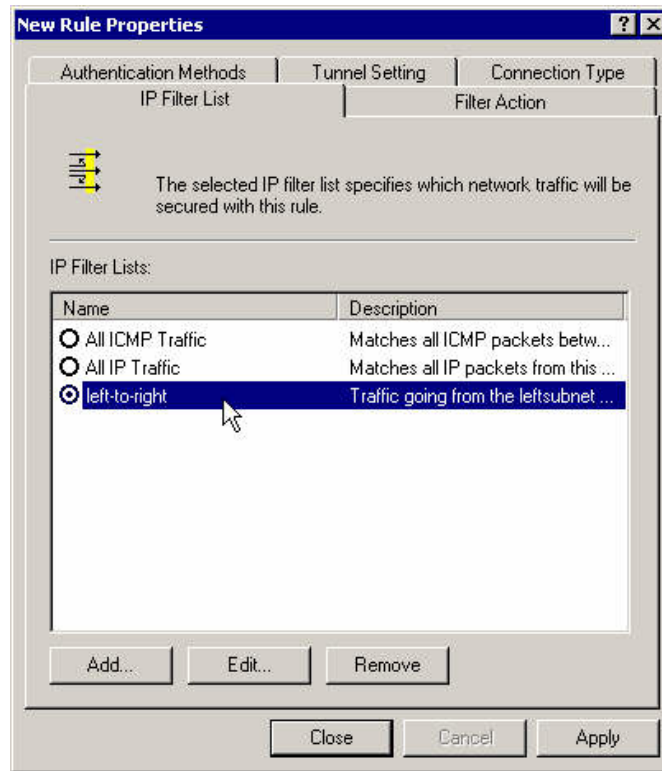

Figure 17

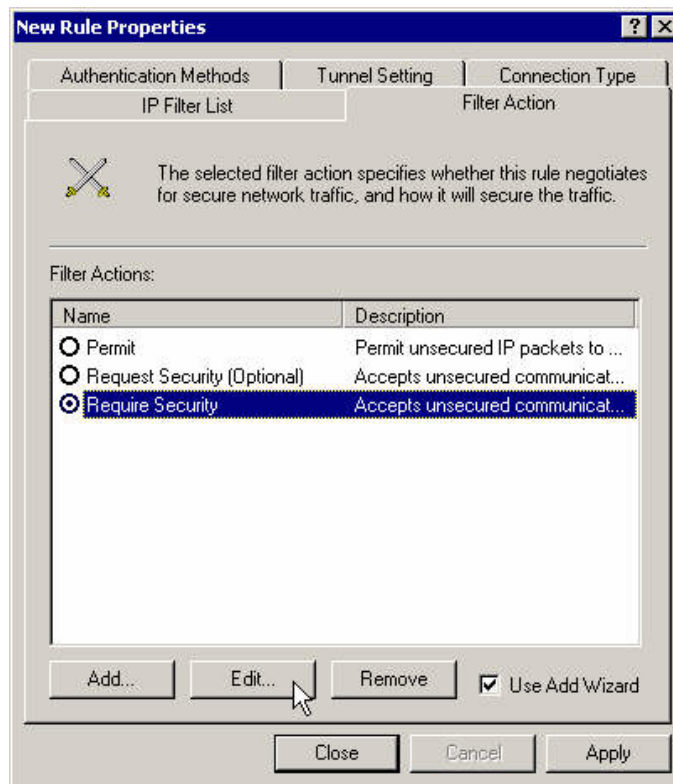**15.** Set the filter action to the **Require Security** action.

Figure 18

16. Set these action properties and move the proposal 3DES-MD5 to the top of the list. Select **Session Key Perfect Forward Secrecy** checkbox.
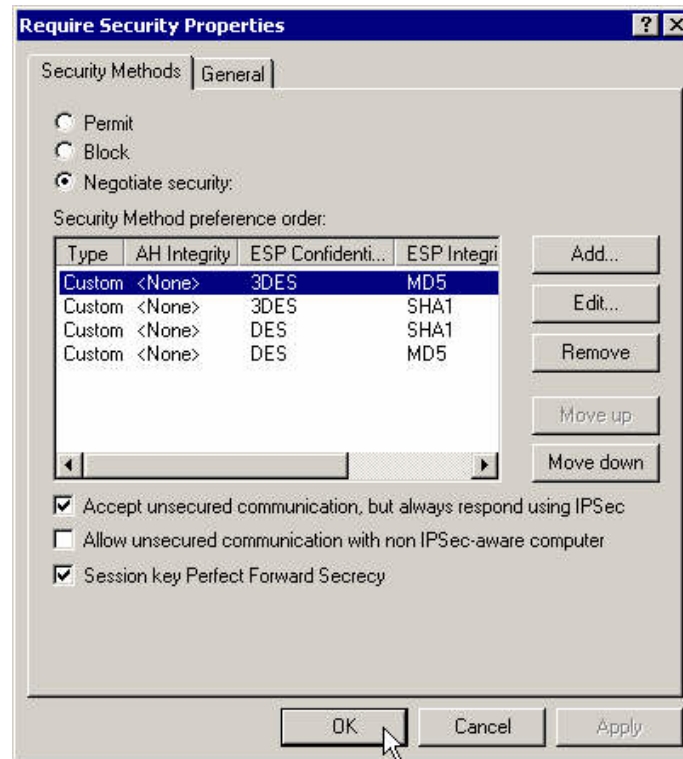

<div align="right">**Figure 19**</div>
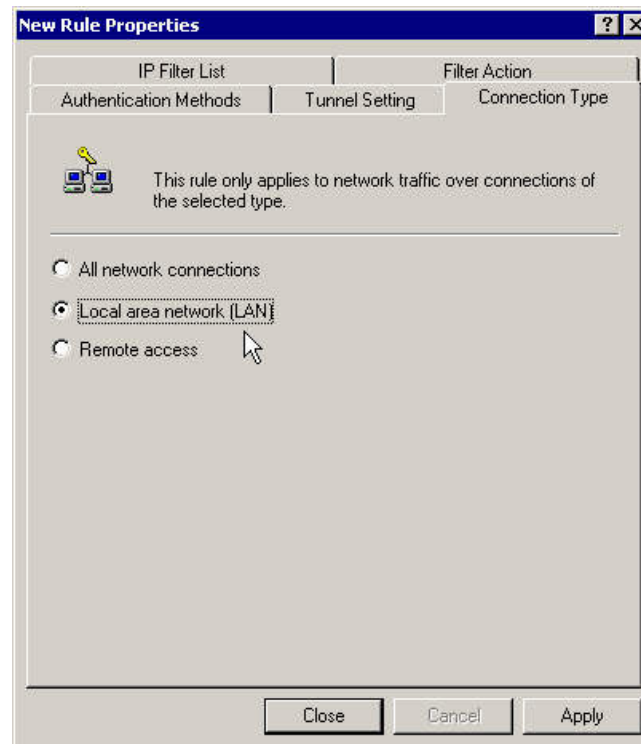
17. Set the connection type for LAN.

<div align="right">**Figure 20**</div>
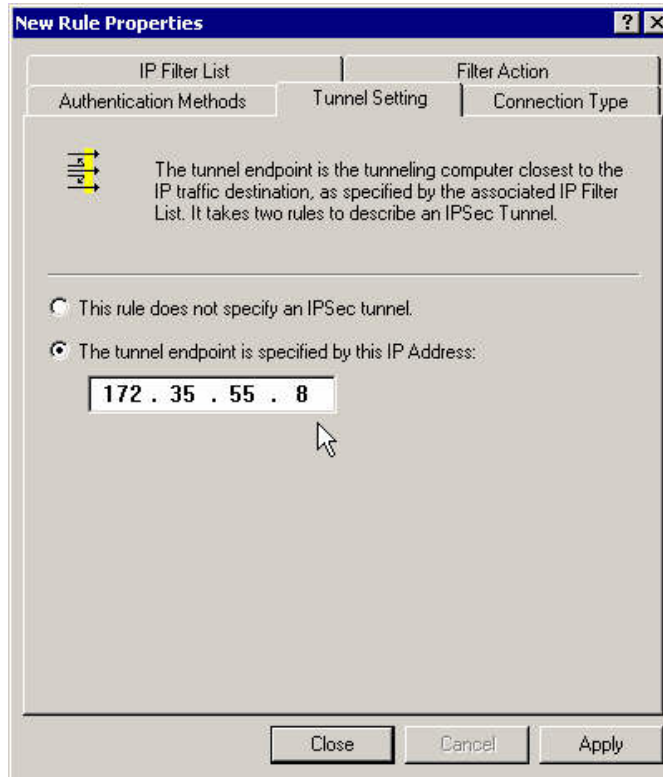
18. Specify the right gateway IP address.

<div align="right">**Figure 21**</div>
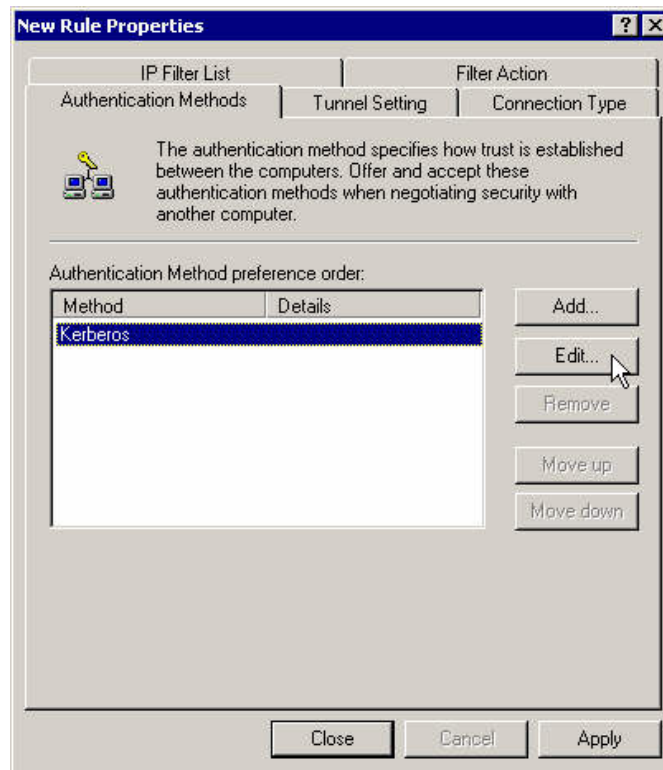
19. Modify the authentication method.

<div align="right">**Figure 22**</div>
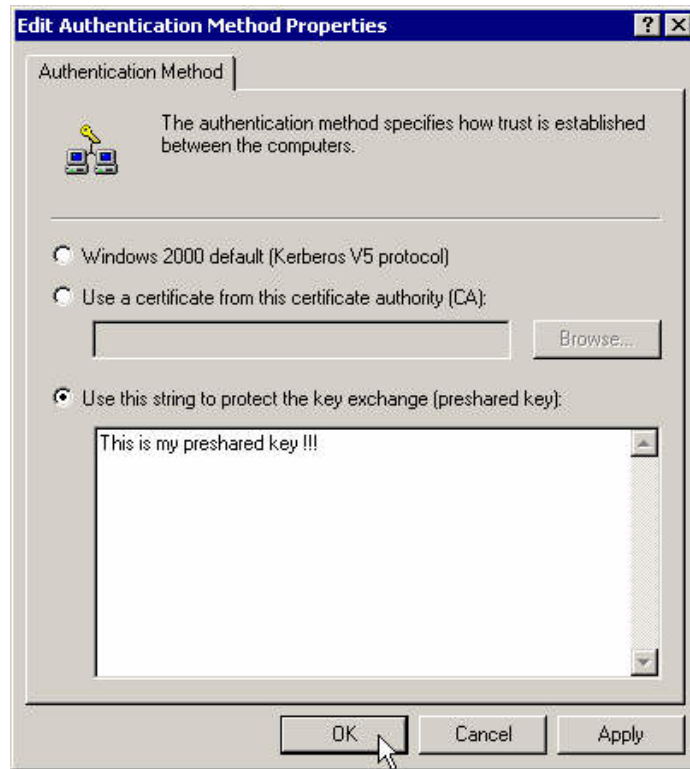
20. Set it to pre-shared key and enter it there.

Figure 23

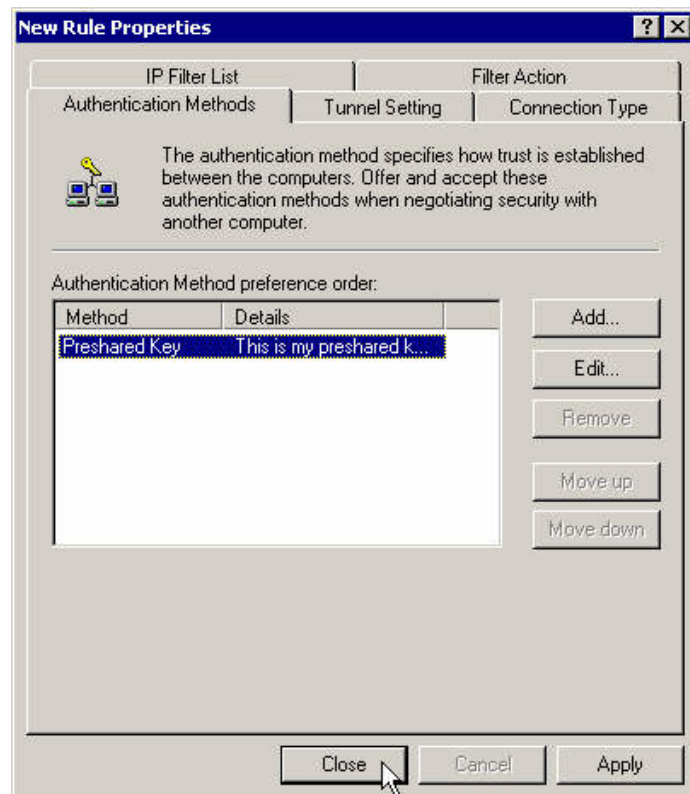**21.** Close the first rule's properties box.

Figure 24

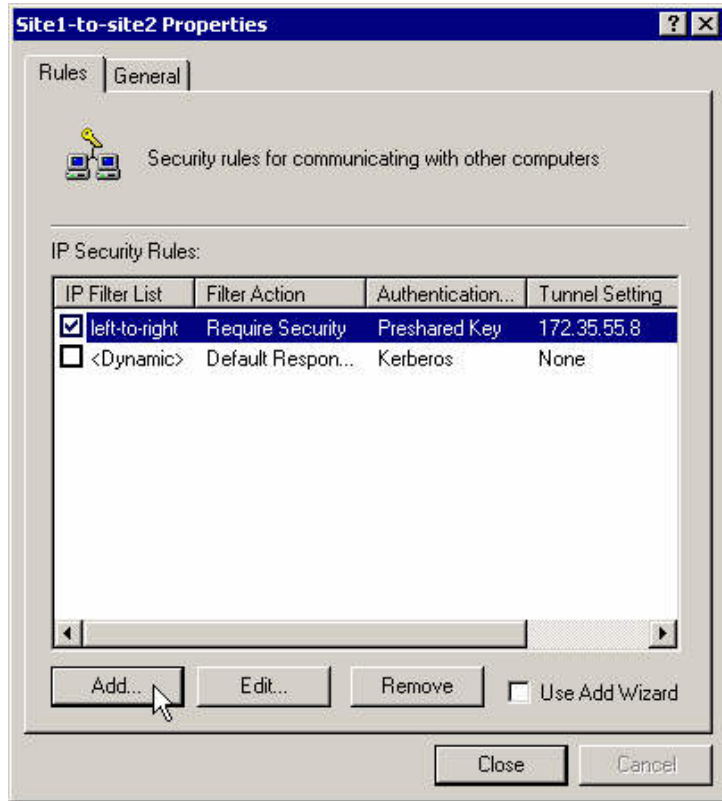**22.** Create a second rule for the traffic from the right subnet to the left subnet.

Figure 25

23. Create a new filter for that rule.
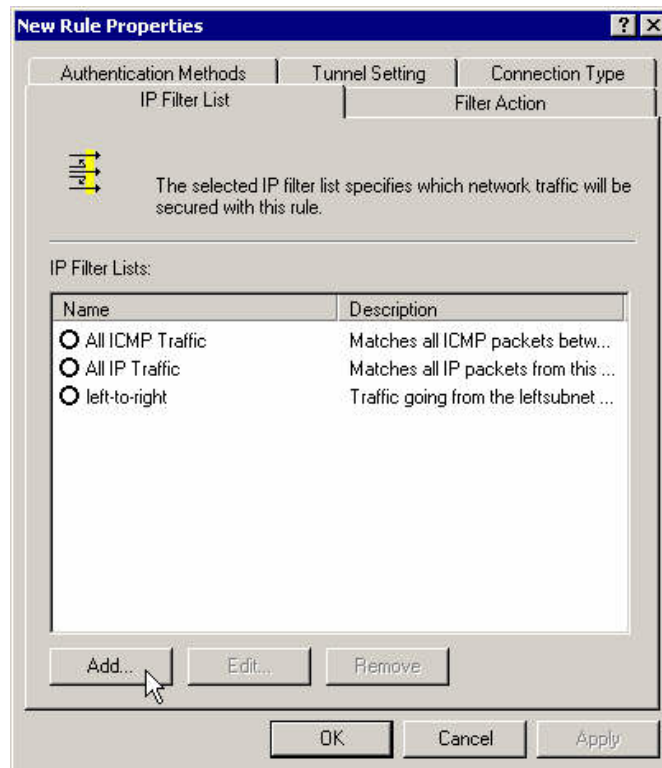

Figure 26

24. Enter a name, description and add the filter.
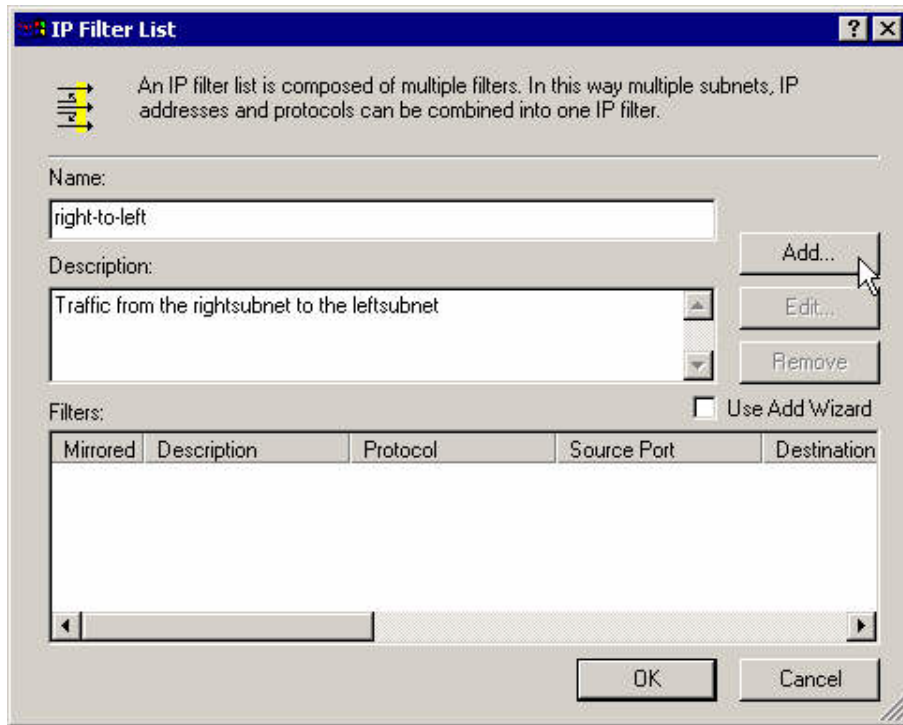

Figure 27

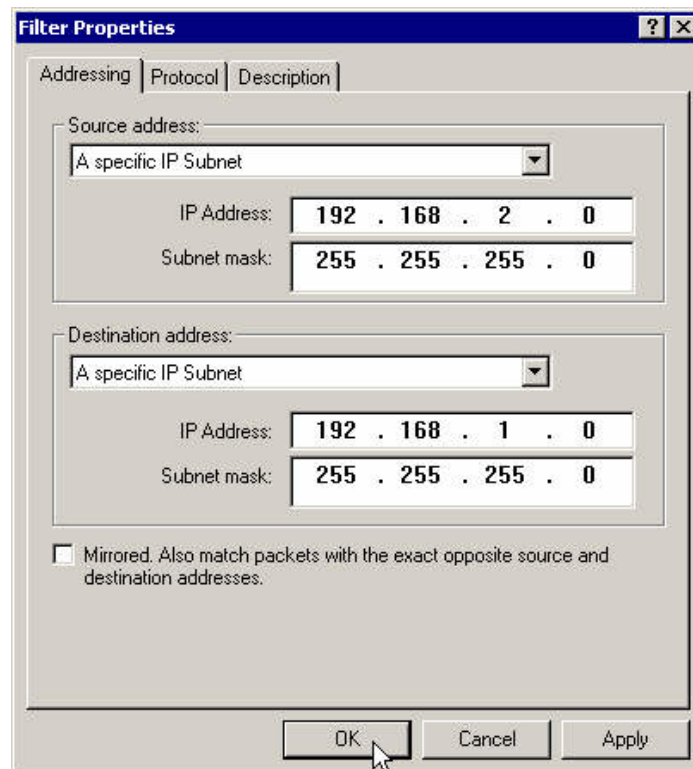**25.** Enter the right subnet as the source address and the left subnet as the destination address.

Figure 28
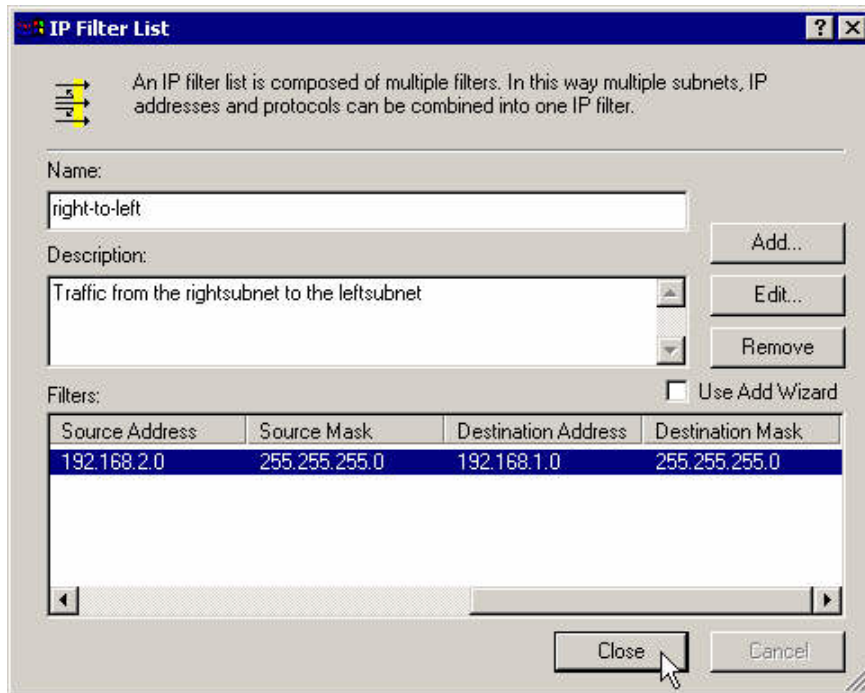
26. Close the IP filter's properties box.

<div align="right">**Figure 29**</div>

27. Assign the newly created filter to that rule.
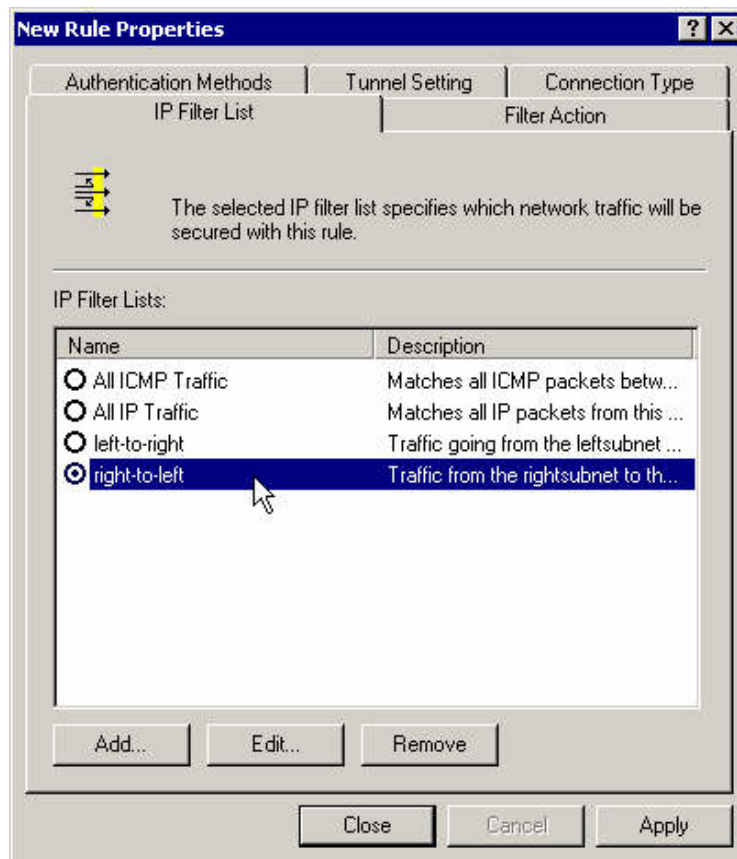

<div align="right">**Figure 30**</div>

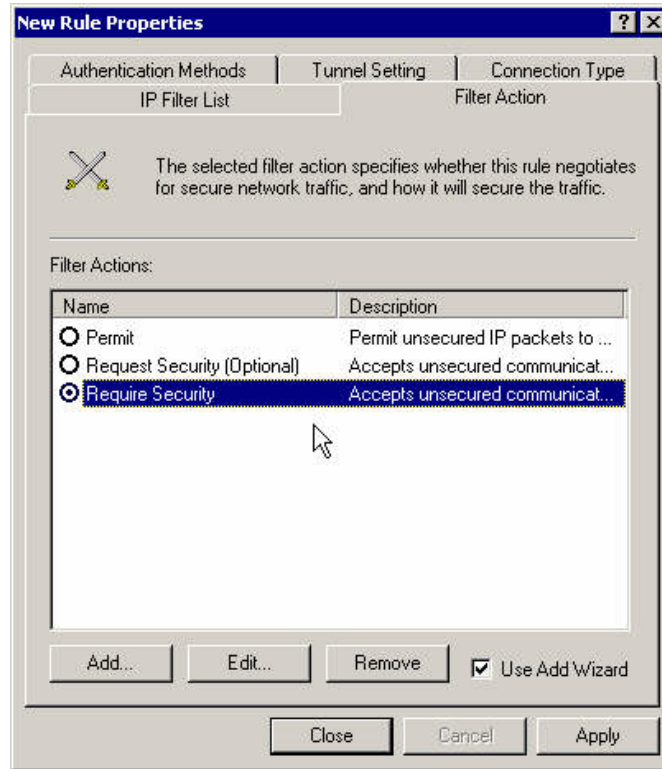**28.** Select the **Require Security** radio button (no need to edit it again).

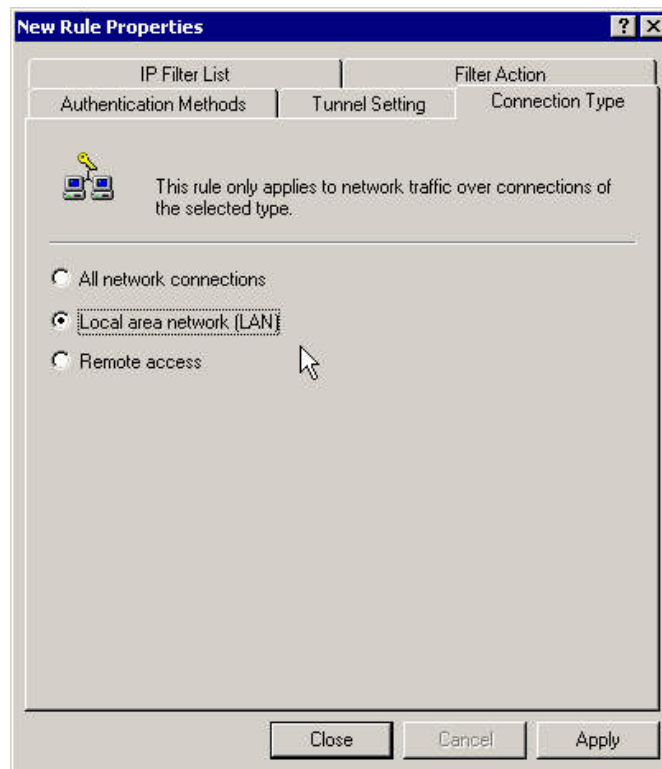**Figure 31**

29. Set the connection's type to LAN.

Figure 32

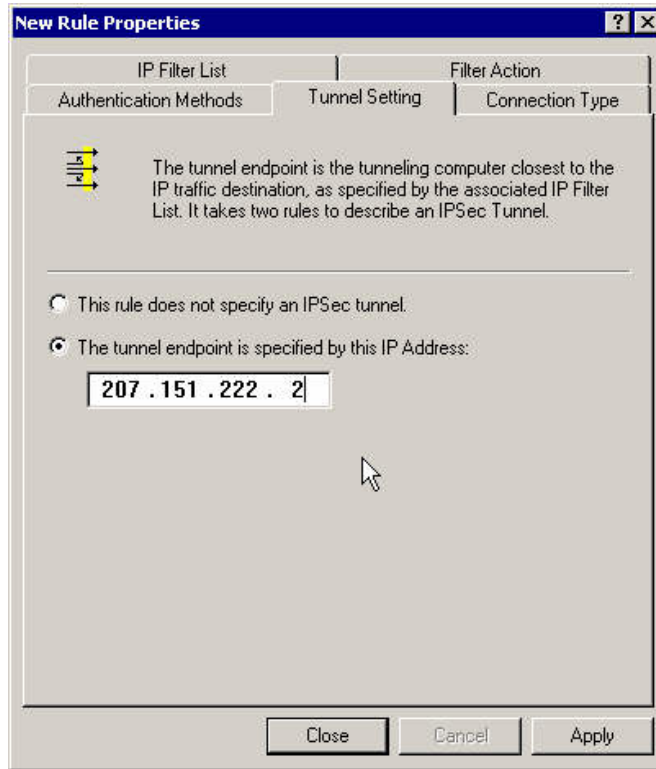**30.** Enter the left gateway (your side) as the tunnel endpoint.

Figure 33

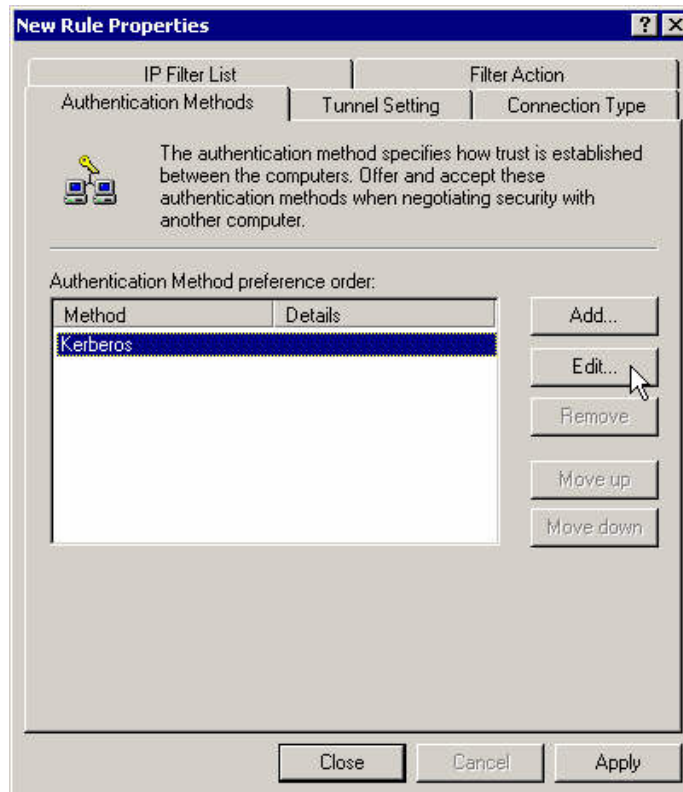**31.** Modify the authentication method.

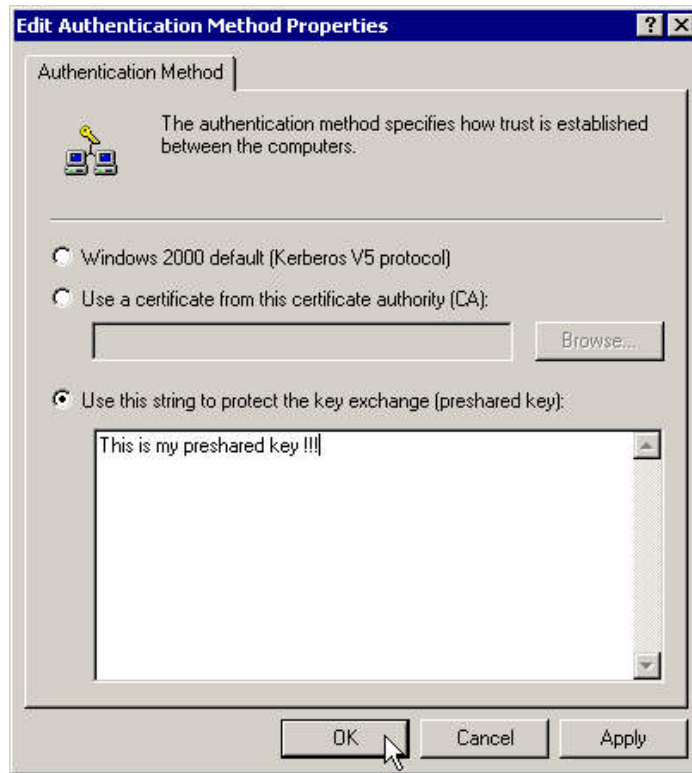**Figure 34**

32. Enter your pre-shared key again.

Figure 35

33. Close that rule's properties box.

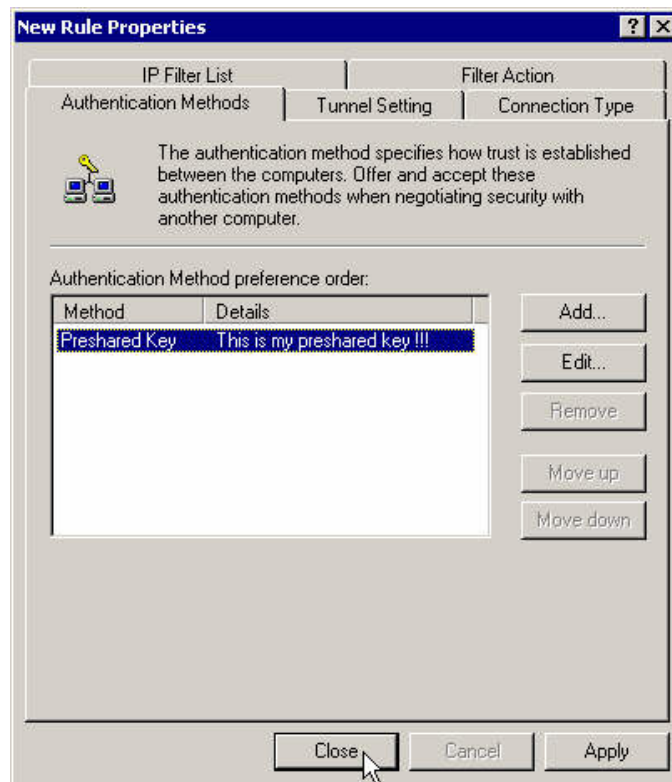**Figure 36**

34. Select the 2 rules to apply on that policy.

<div align="right">**Figure 37**</div>

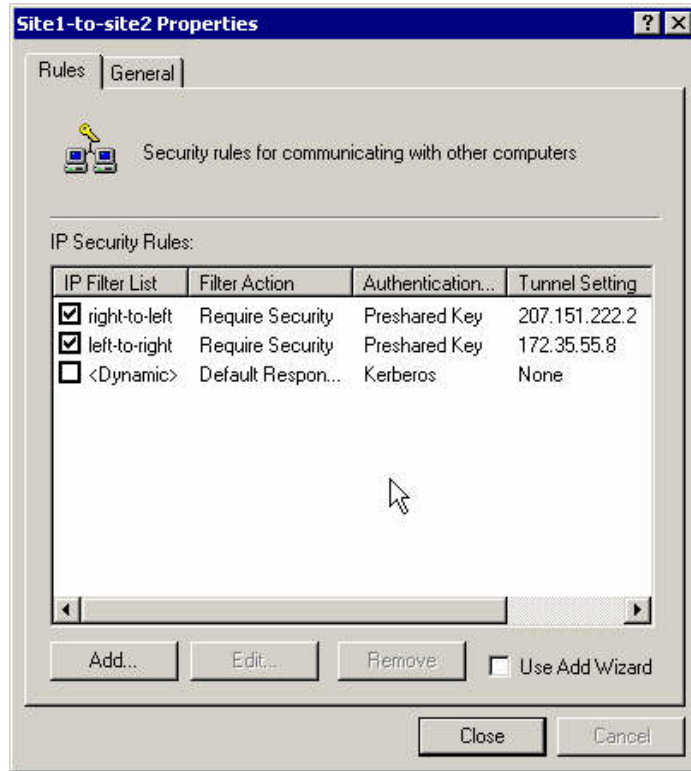**35.** On the general tab, press the **Advanced** button.

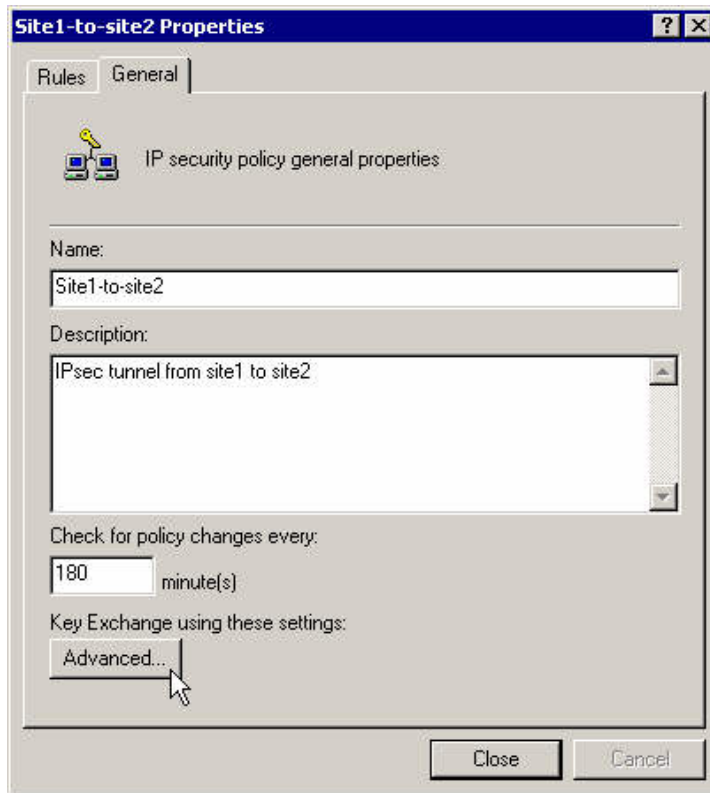<div align="right">**Figure 38**</div>

36. Select **Master Key Perfect Forward Secrecy** checkbox and press the **Methods** button.
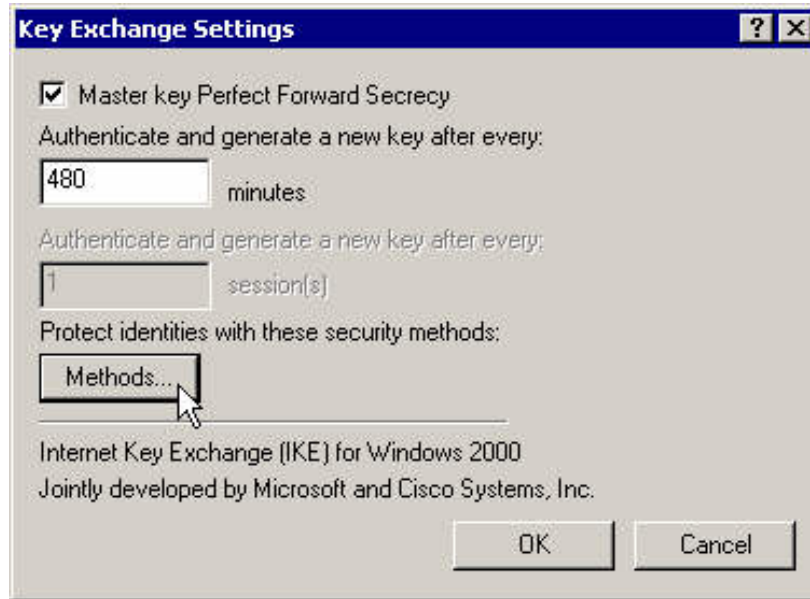

<div align="right">**Figure 39**</div>

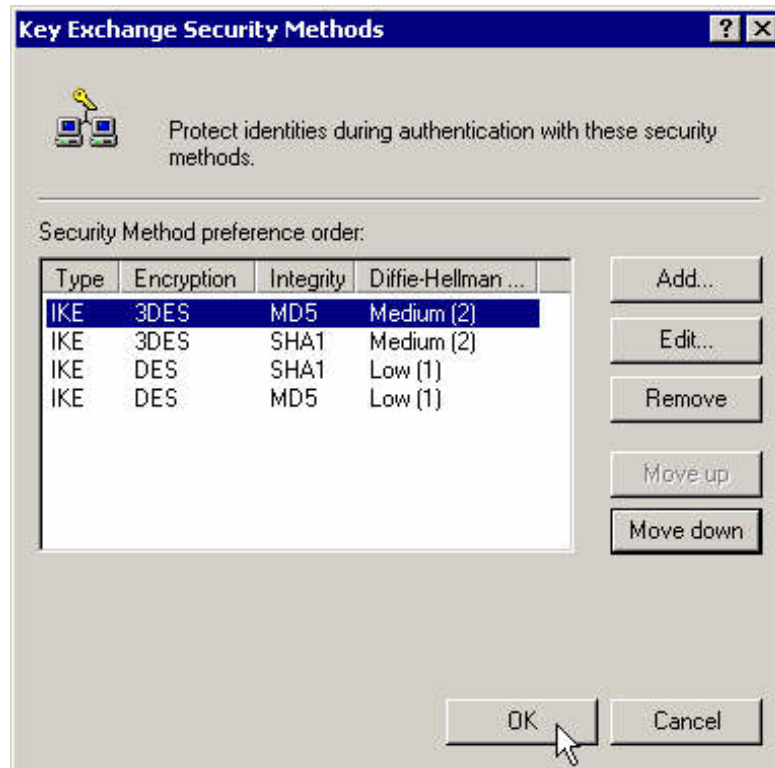**37.** Move the proposal **3DES-MD5** to the top of the list and close that policy.

<div align="right">**Figure 40**</div>

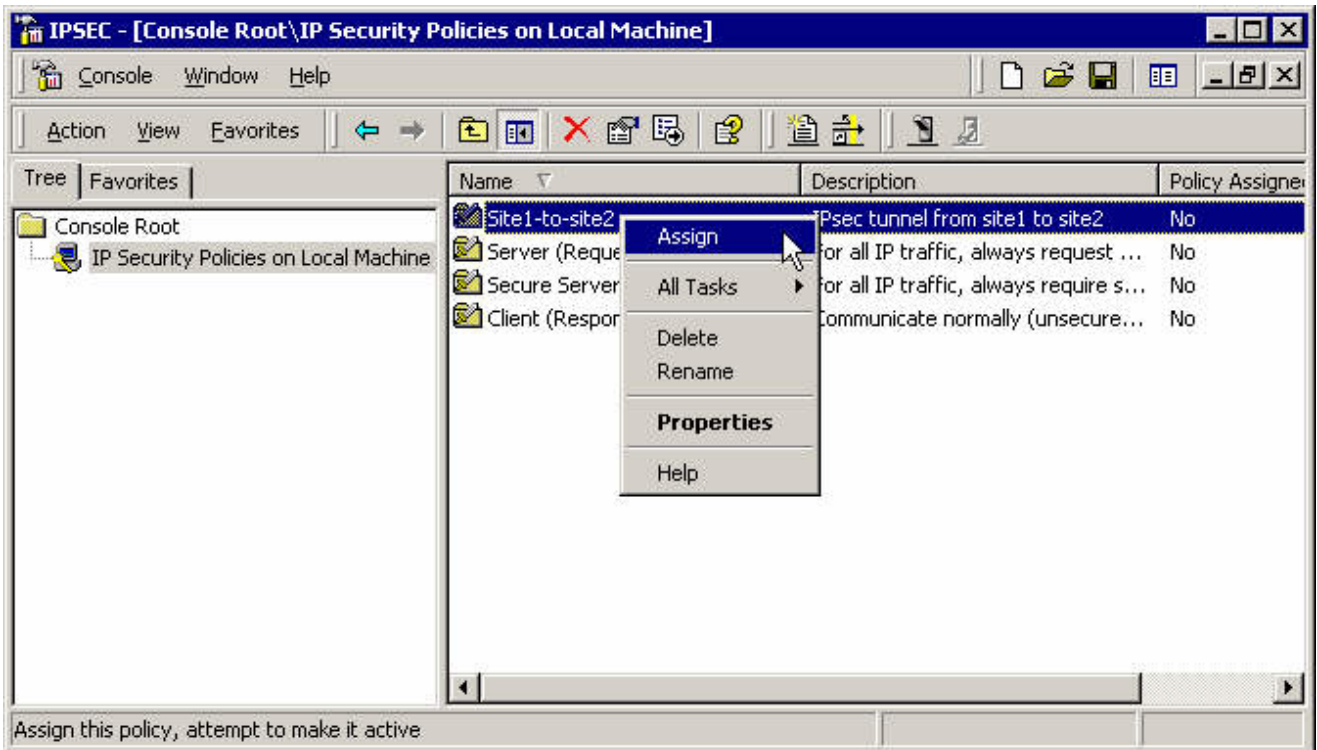**38.** Select **Assign** for that policy to make it active.

<div align="right">**Figure 41**</div>

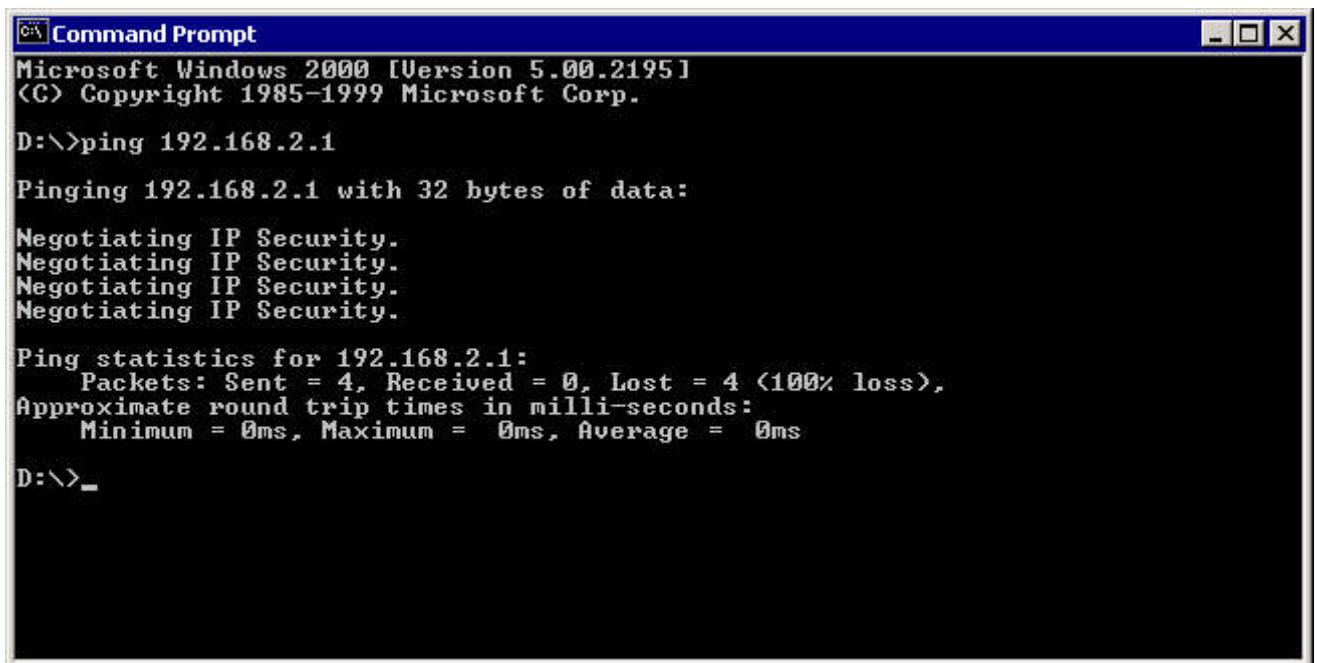**39.** Test it. Wait and ping it again. Then check the events log because it never works the first time.

<div align="right">**Figure 42**</div>

40. You'll have to modify your policy to correct what's wrong. Restart the **Ipsec** service before testing it again.
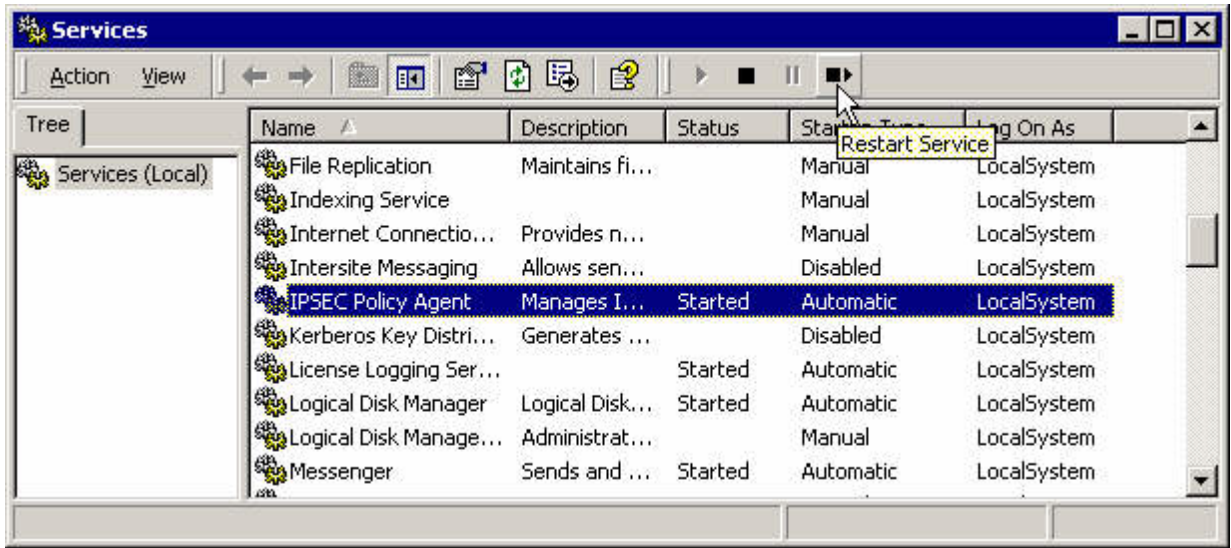

Figure 43

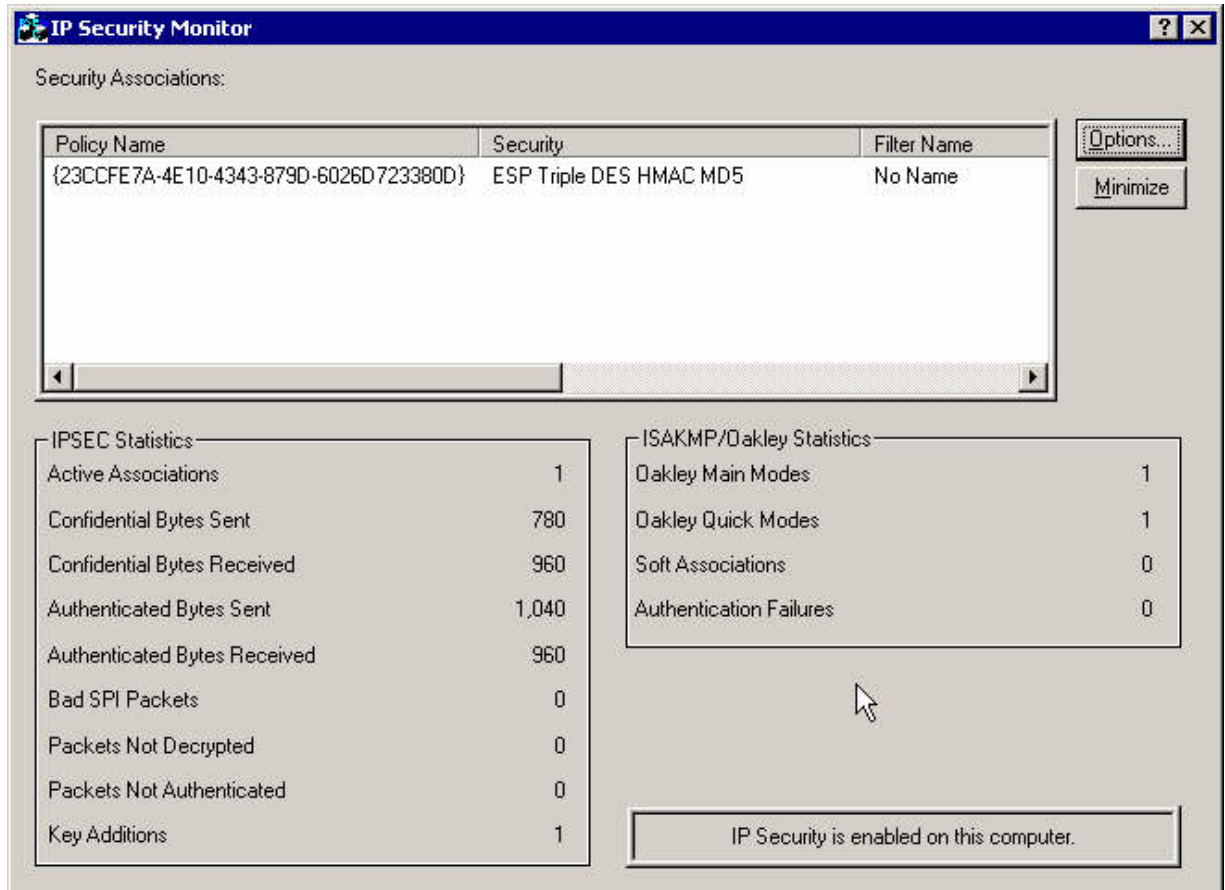**41.** When it works you can monitor the tunnel with the **ipsecmon** program.

Figure 44

3 Useful Links

- The Quadro home site!
  http://www.epygi.com

- The Windows 2000 IPSec setup!
  http://jixen.tripod.com/win2k-screen.html

- Windows 2000 PPTP-client configuration!
  http://poptop.sourceforge.net/dox/pptp_win2k/