RouteFinder™
Internet Security Appliance

RF550VPN

RF550VPN and IPSec Tunneling on a Windows XP Professional Client

IPSec Tunneling Reference

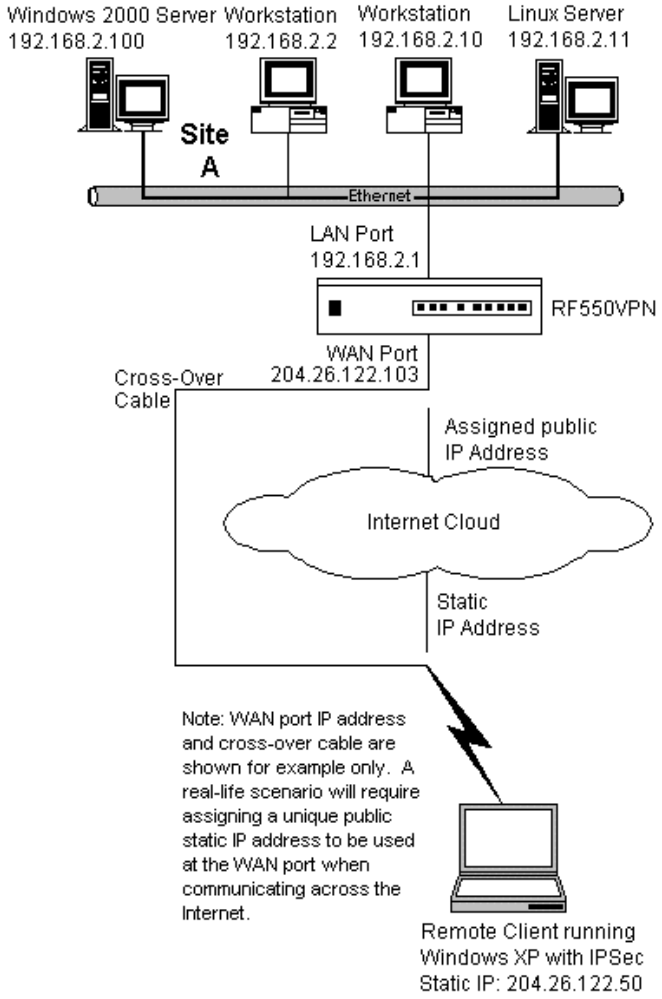
MultiTech® Systems

How To: Configuring IPSec Tunneling in Windows XP or 2000 and Connecting to an RF550VPN

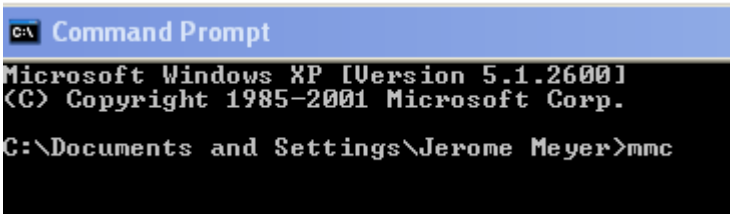
Revision	Date	Description
A	5/30/02	Initial release

The following configuration procedure shows how to configure IPSec tunneling on a Windows XP Professional client so that this client can access a LAN through the Internet. The LAN is located on the protected side of a RF550VPN. It is assumed that the RF550VPN is already configured. This configuration procedure will also work on Windows 2000.

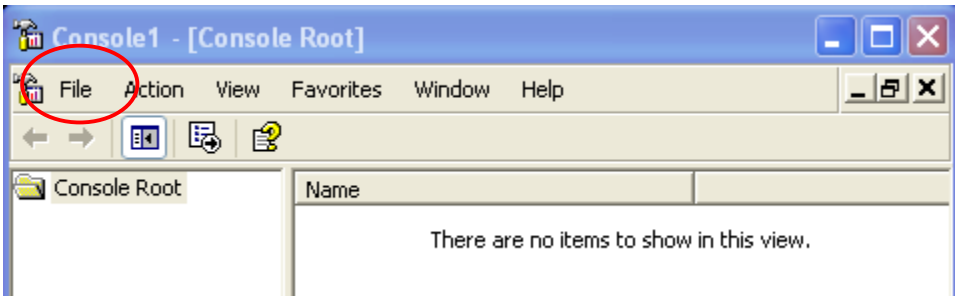
Remote Windows XP Client-to-LAN Configuration Using IPSec Tunneling



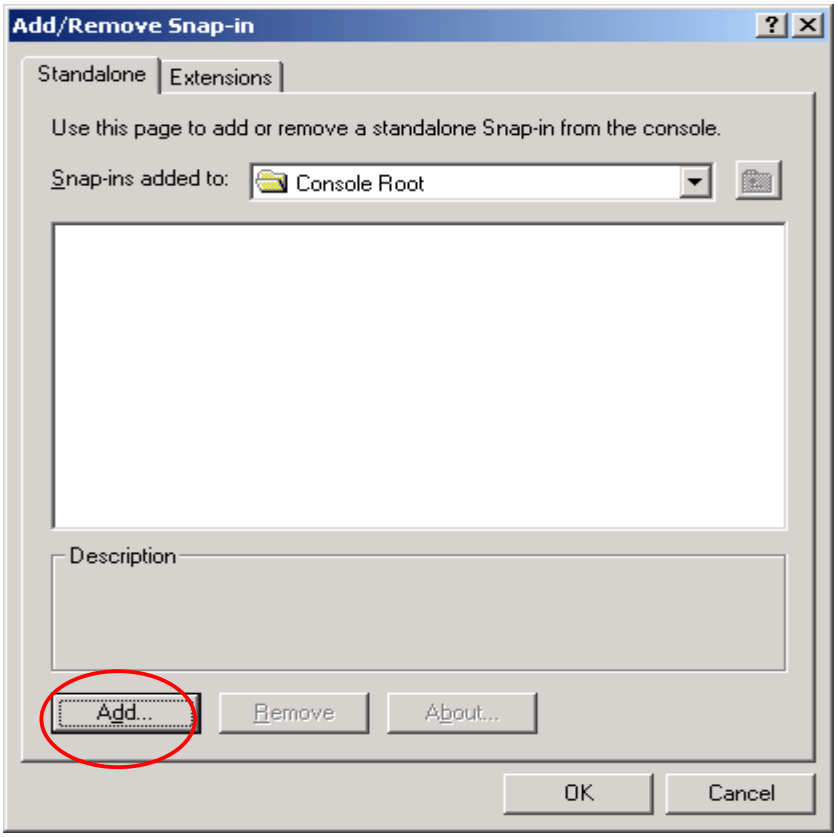
1. At the Windows XP Professional workstation type "**mmc**" on DOS Command Mode.



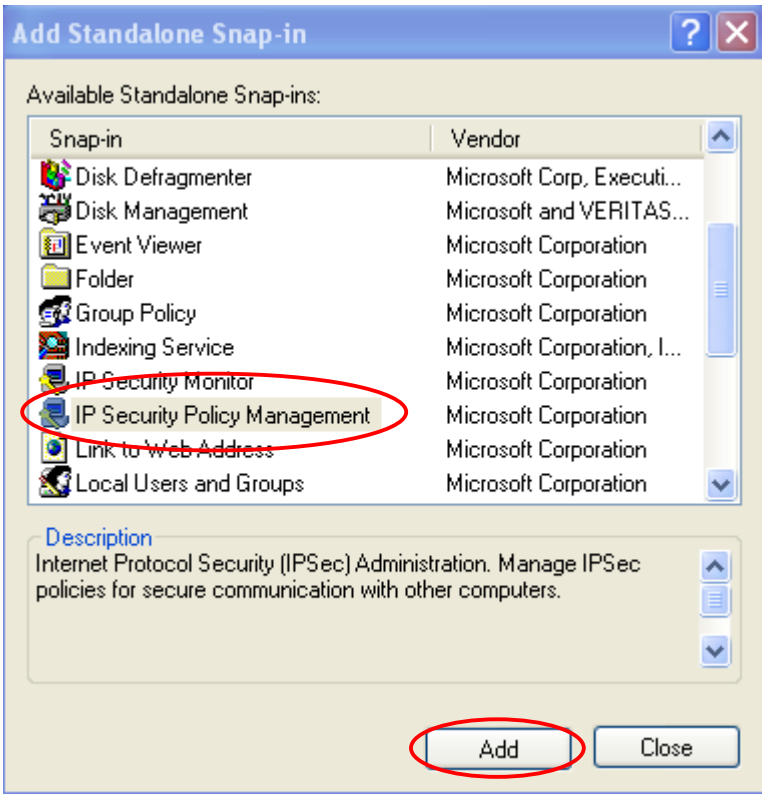
2. Left click on "**File**" and select "**Add/Remove Snap-in.**"



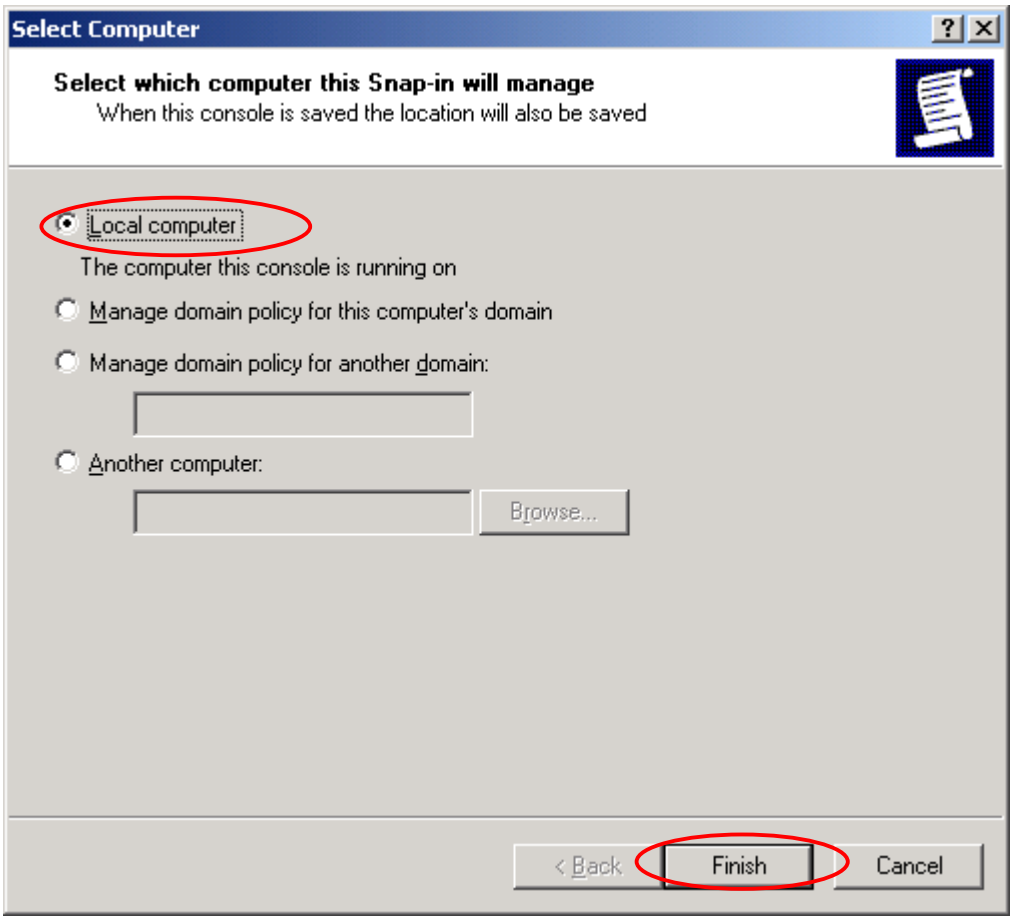
3. Click "**Add.**"



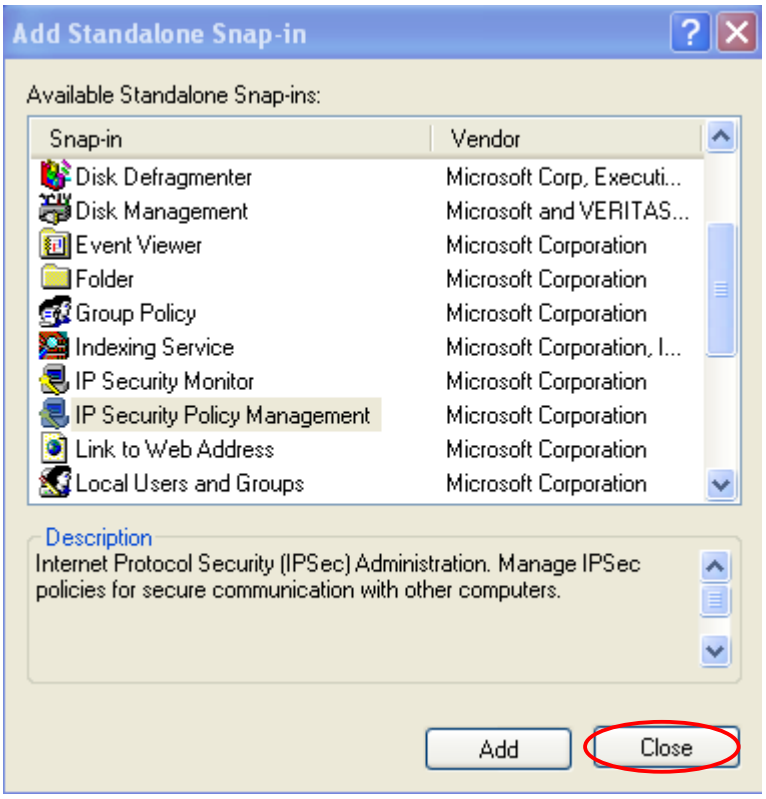
4. Scroll down and highlight "**IP Security Policy Management**" and click on "**Add**."



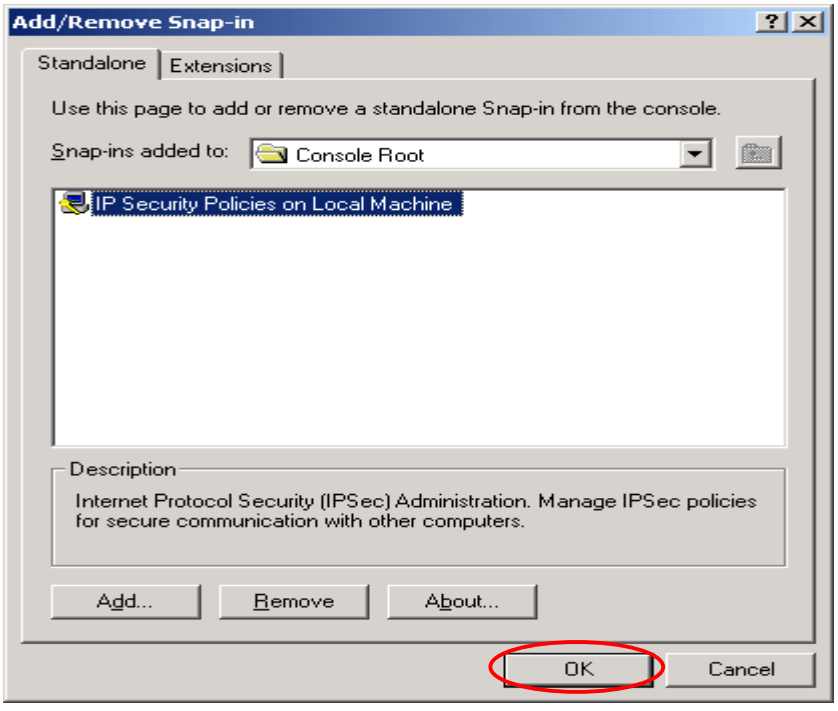
4. Choose “**Local computer**” and click “**Finish**.”



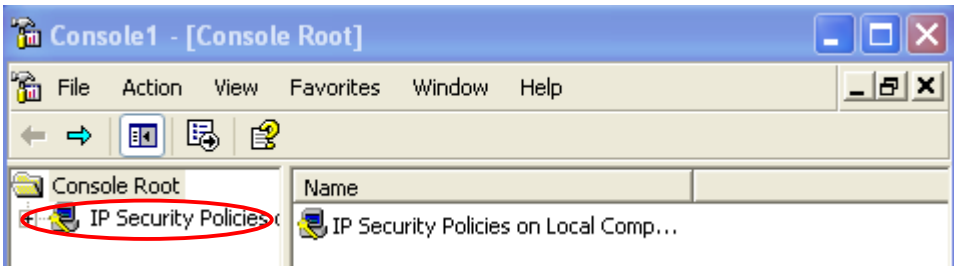
5. Click on "**Close**."



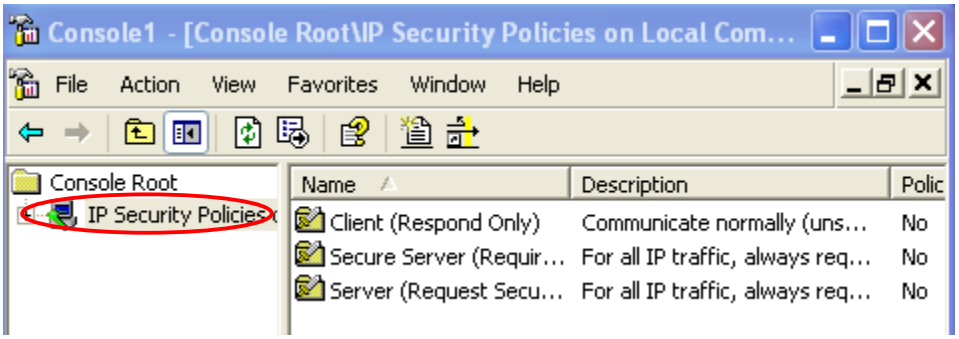
6. Click "**OK**."



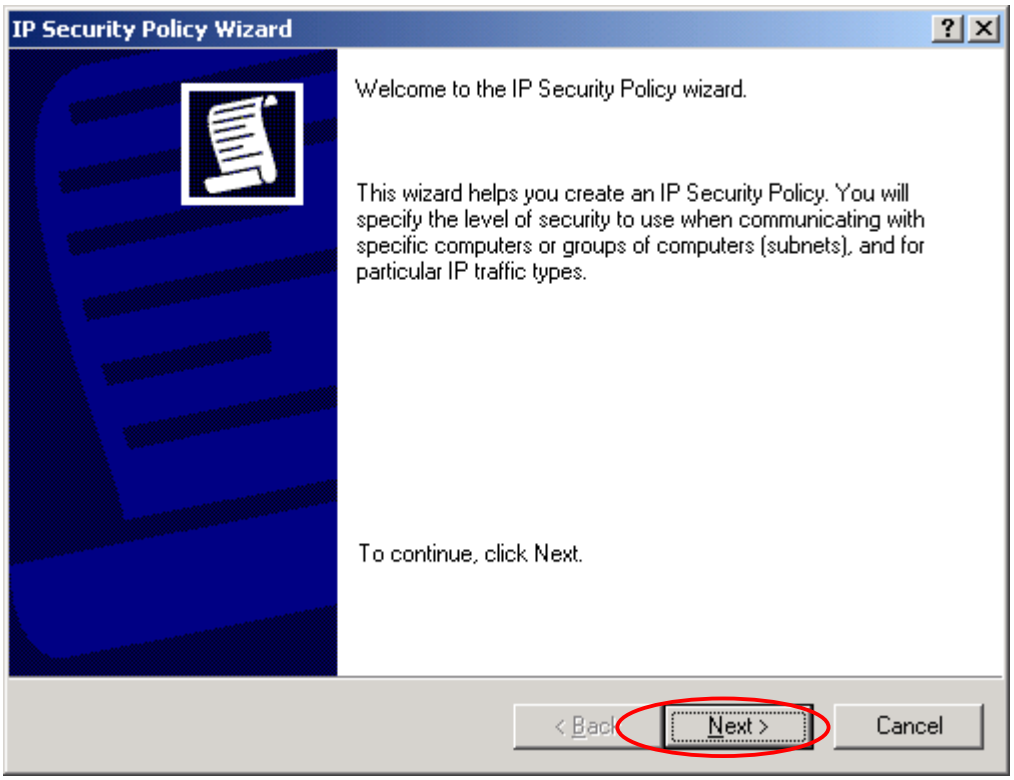
7. Click left button on "**IP Security Policies on Local Computer**" under "**Console Root**" to display the local computer security policies under "**Name**."



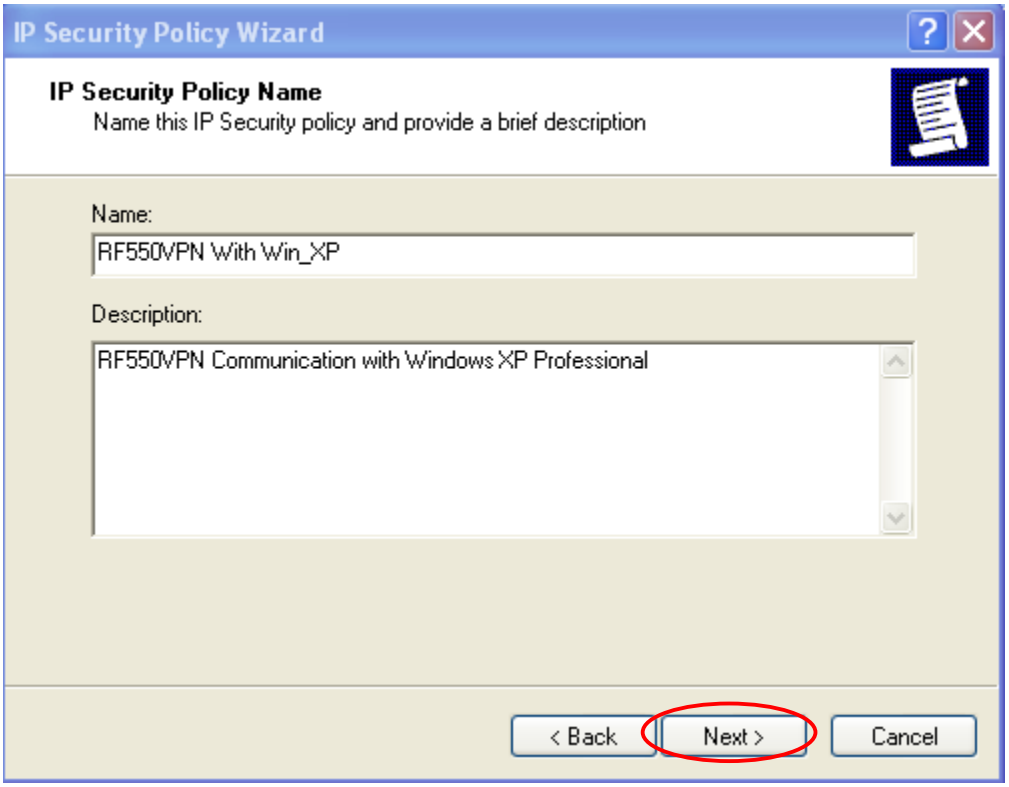
8. Right click on "**IP Security Policies on Local Computer**" and select "**Create IP Security Policy**."



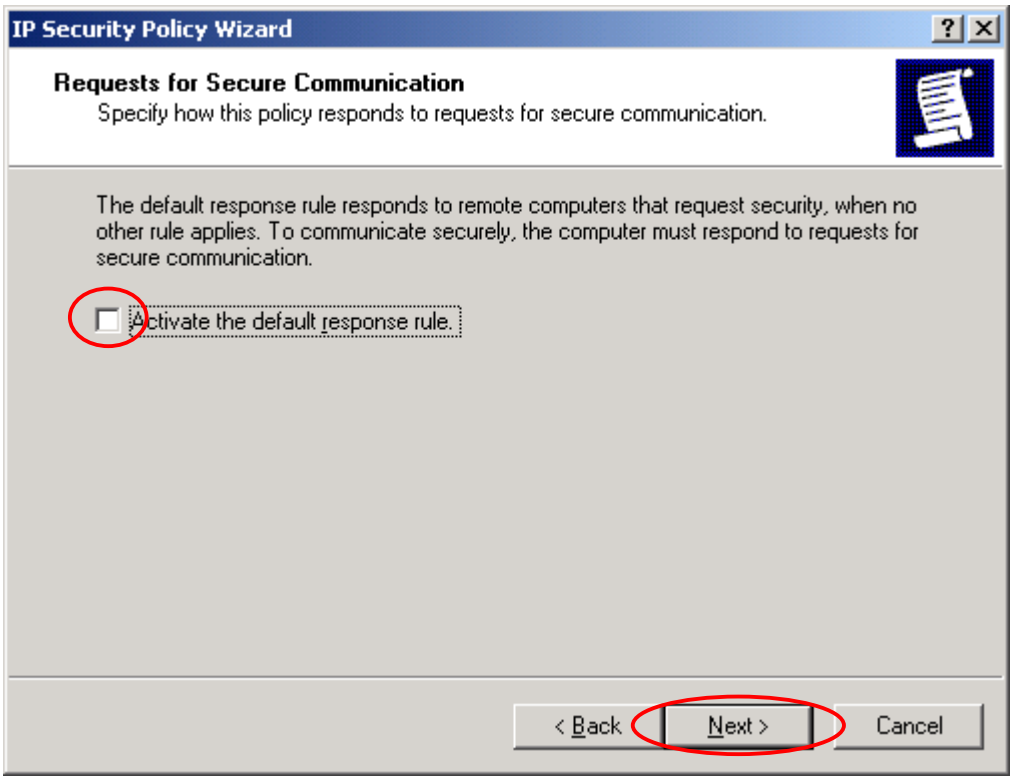
9. Click "**Next**."



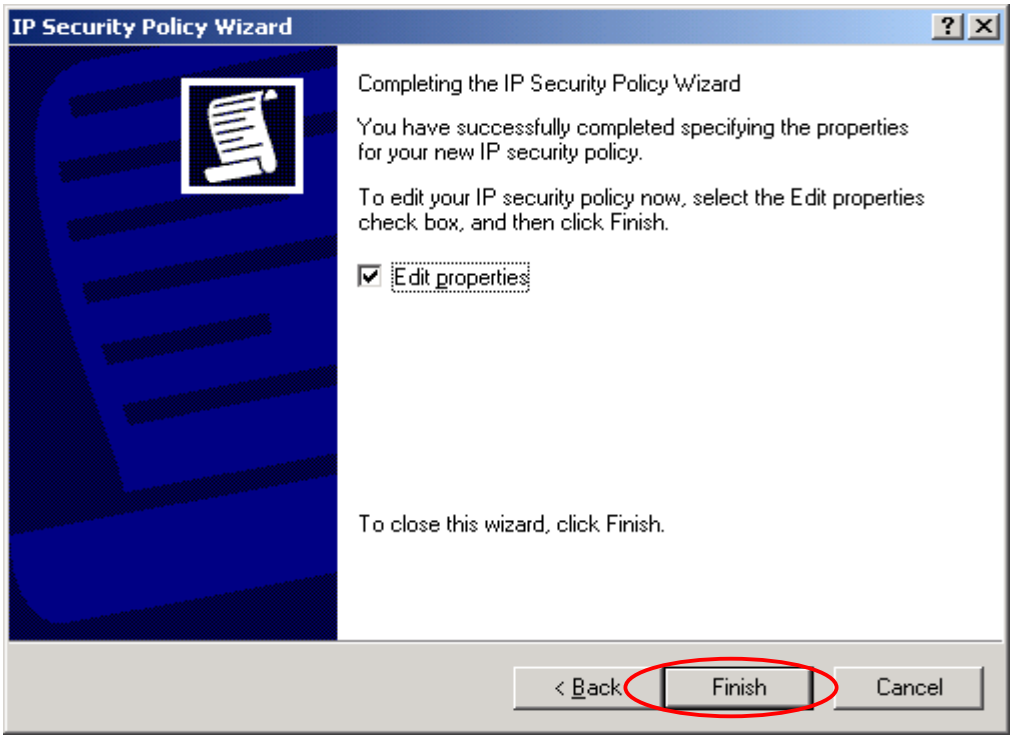
10. Type Name and Description for security policy, and then click "**Next**."



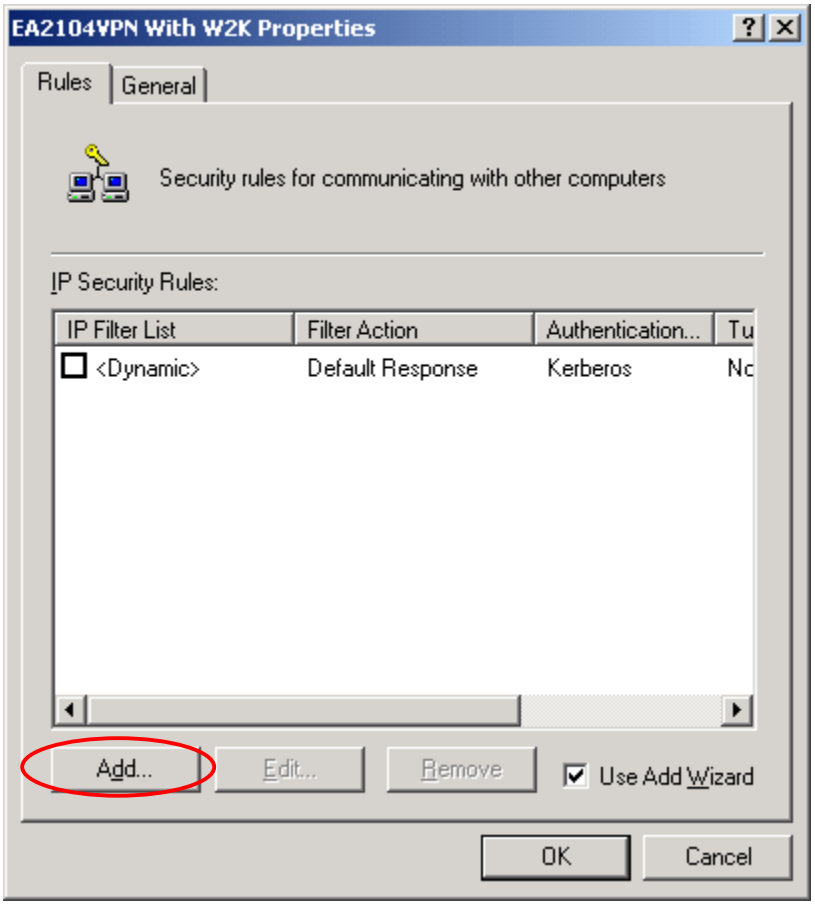
11. Uncheck "**Activate the default response rule**", and then click "**Next**."



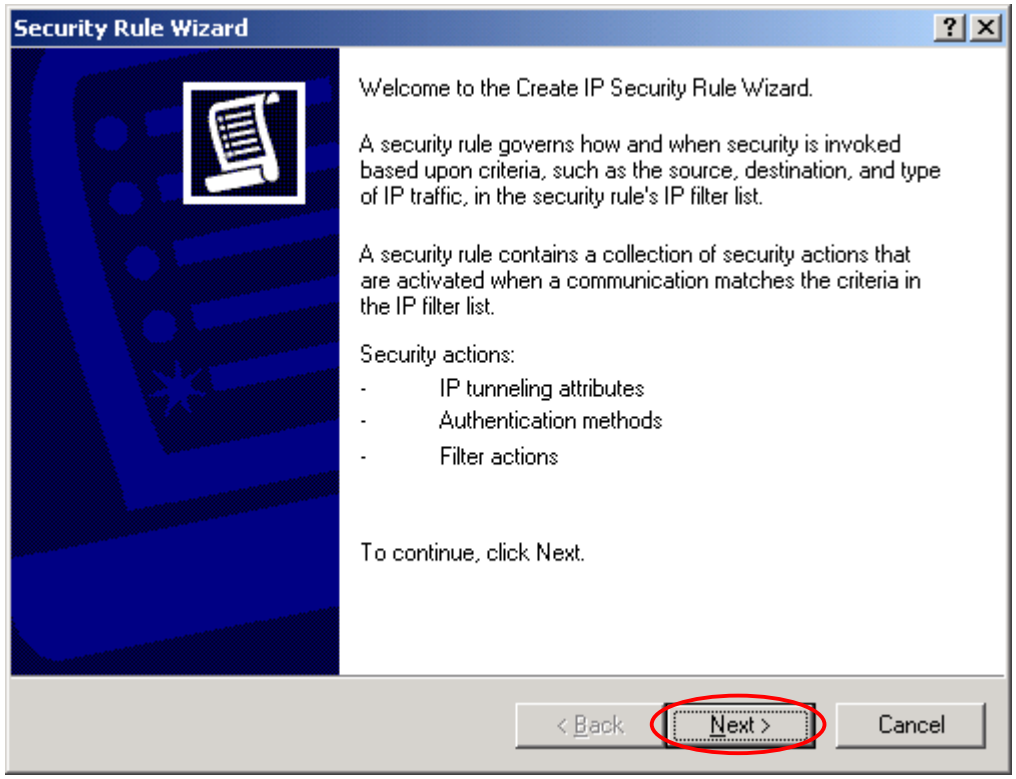
12. Click "**Finish**."



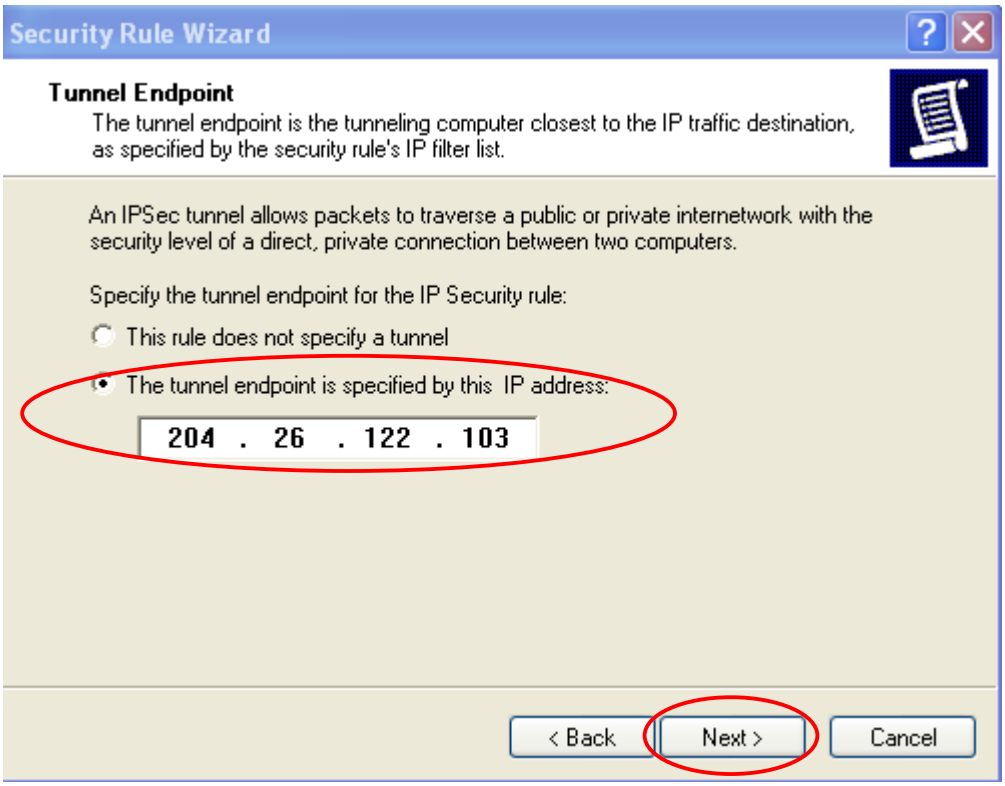
13. Click "**Add**."


EA2104VPN With W2K Properties
Rules
General
Security rules for communicating with other computers
IP Security Rules:
IP Filter List
Filter Action
Authentication...
Tu
<Dynamic>
Default Response
Kerberos
Nc
Add...
Edit...
Remove
Use Add Wizard
OK
Cancel

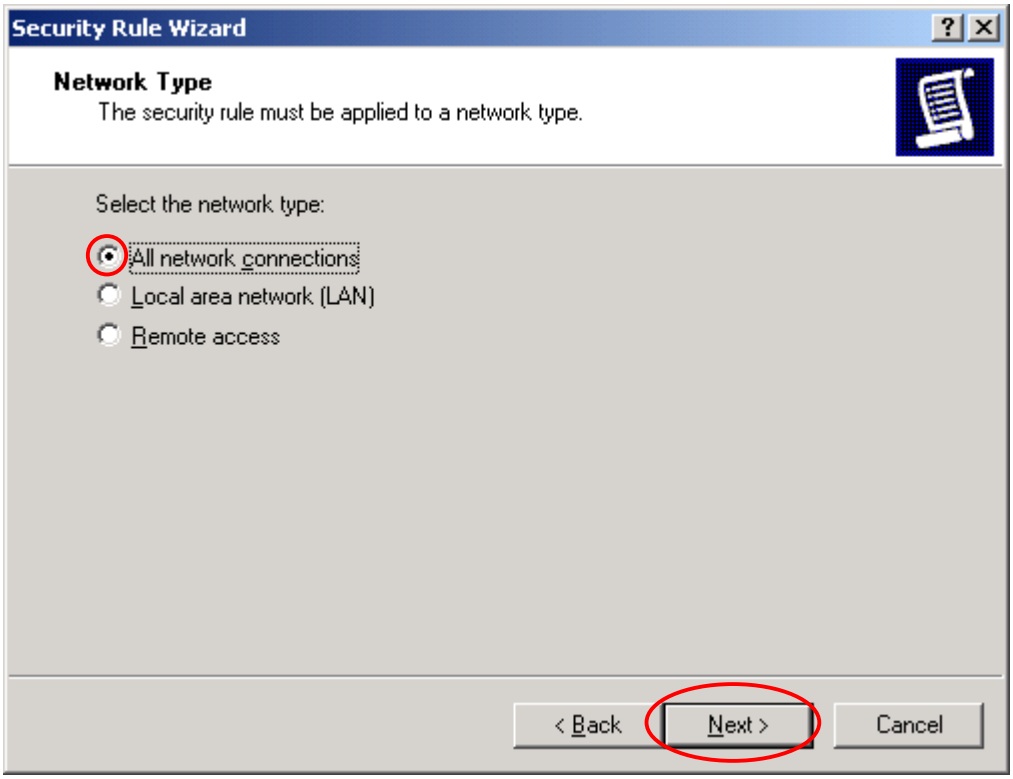
14. Click “**Next**.”



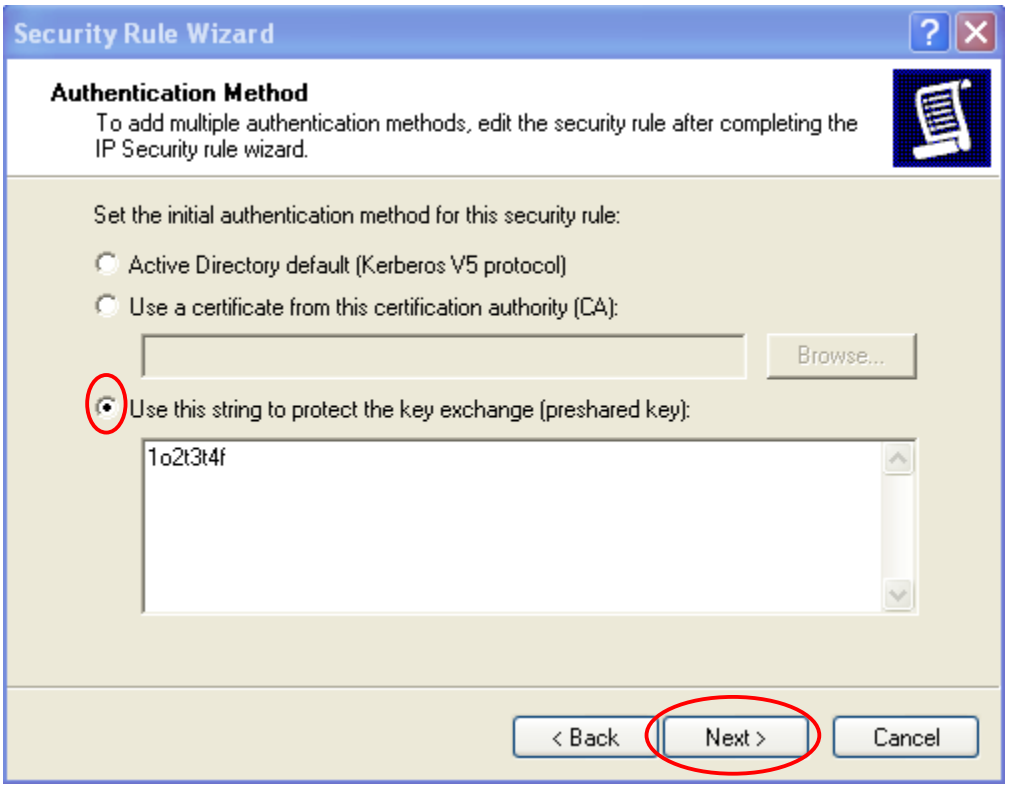
15. Input IP Address into "**The tunnel endpoint specified by this IP address:**" and then click "**Next**." (Ex: RF550VPN WAN Port IP Address 204.26.122.103)



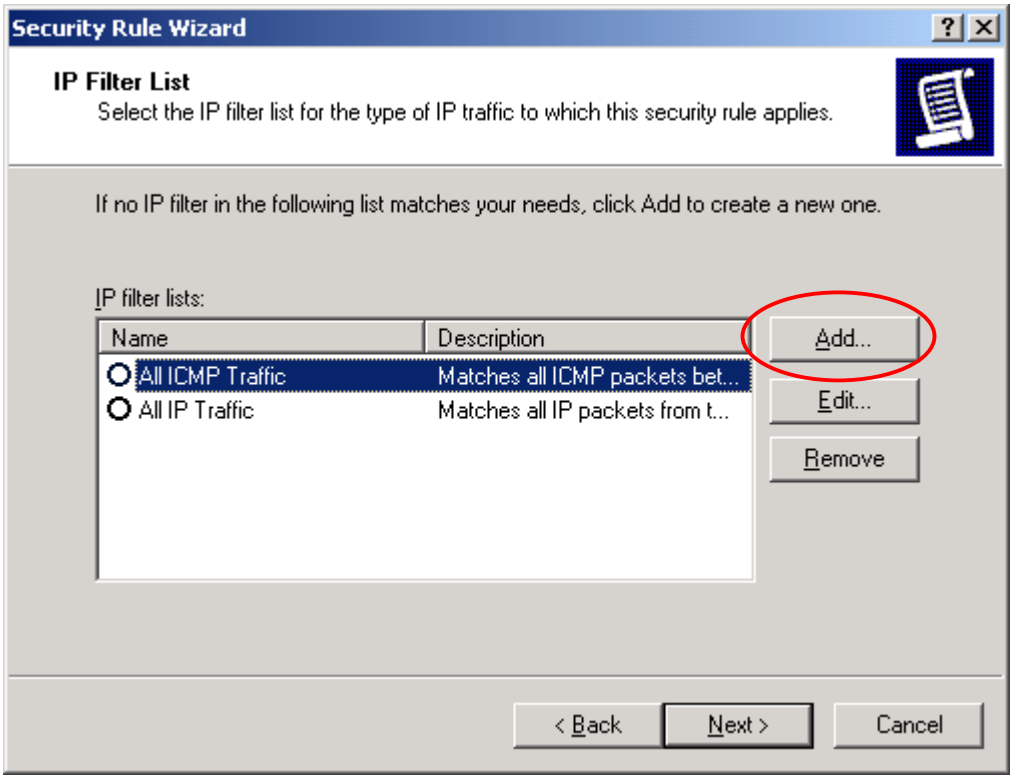
16. Choose "**All network connections**", and then click "**Next**."



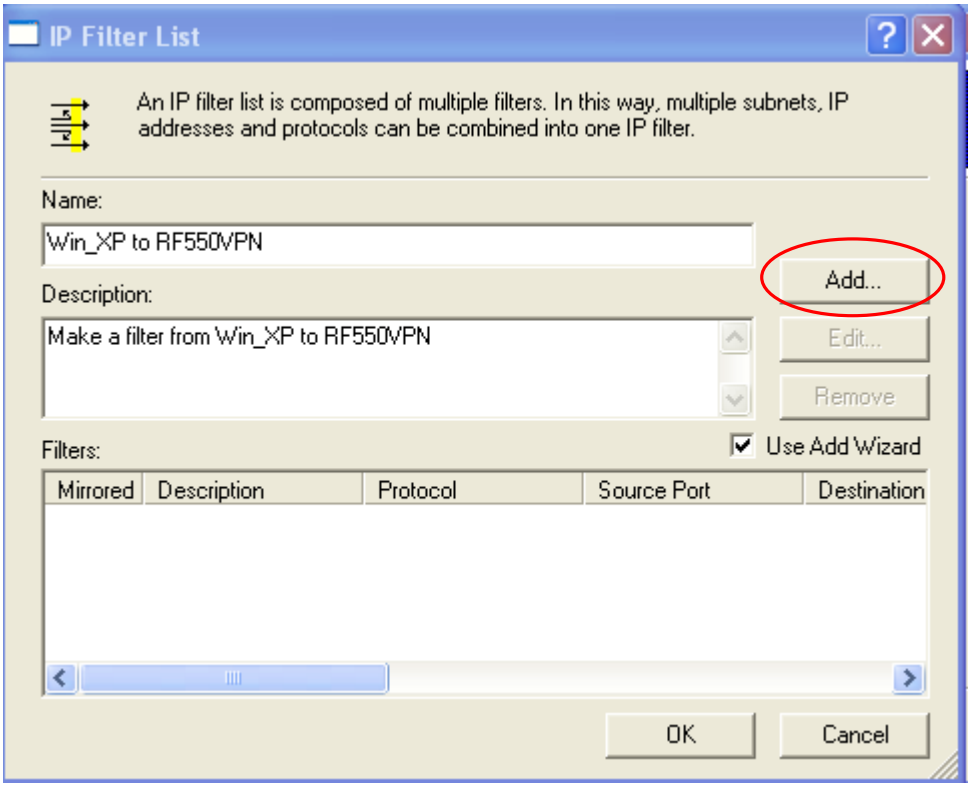
17. Choose "**Use this string to protect the key exchange (preshared key)**" and then click "**Next**." (Ex: RF550VPN preshared key 1o2t3t4f)



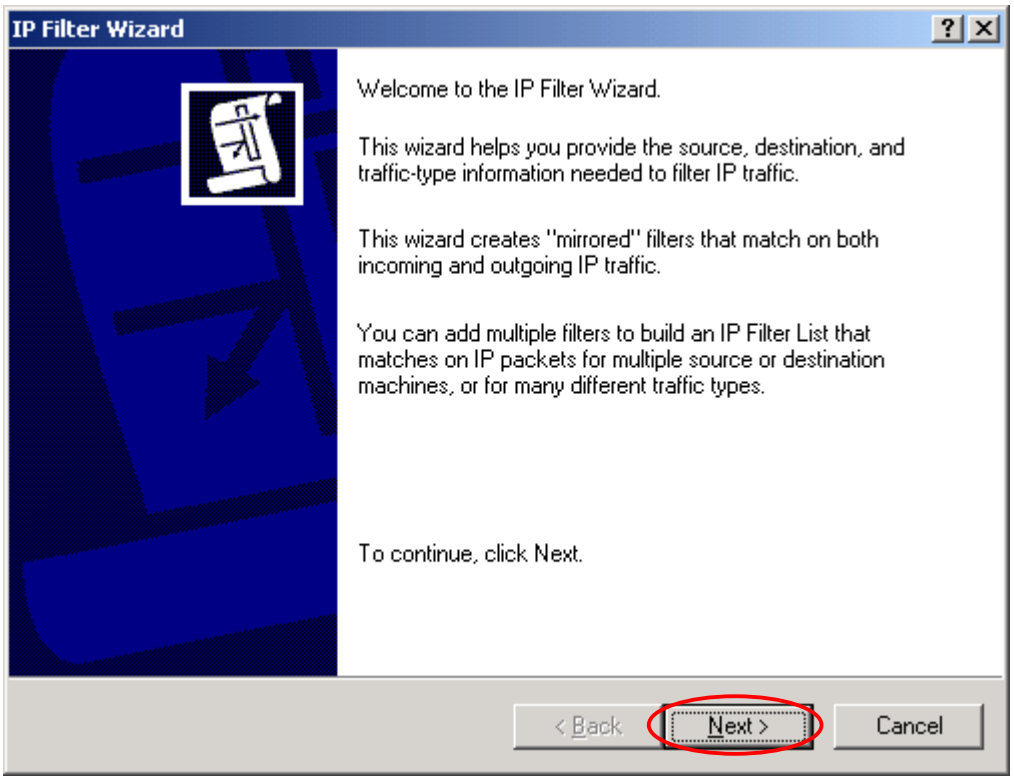
18. Click "**Add**."



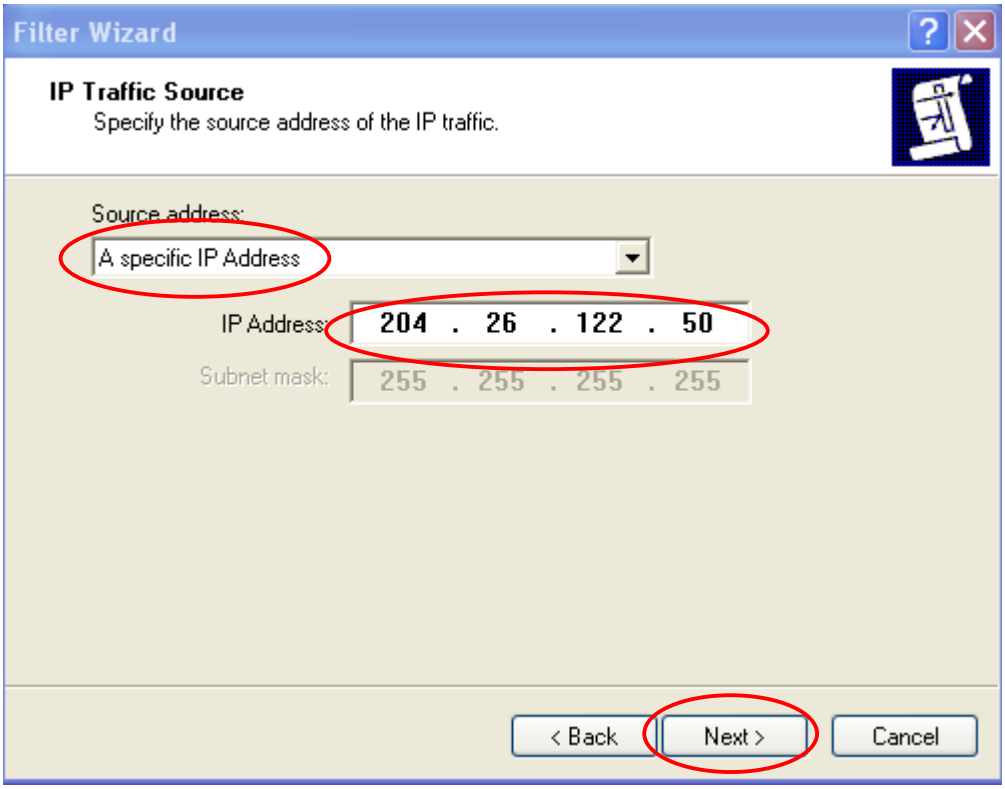
19. Type a filter name and description and then click "**Add**."



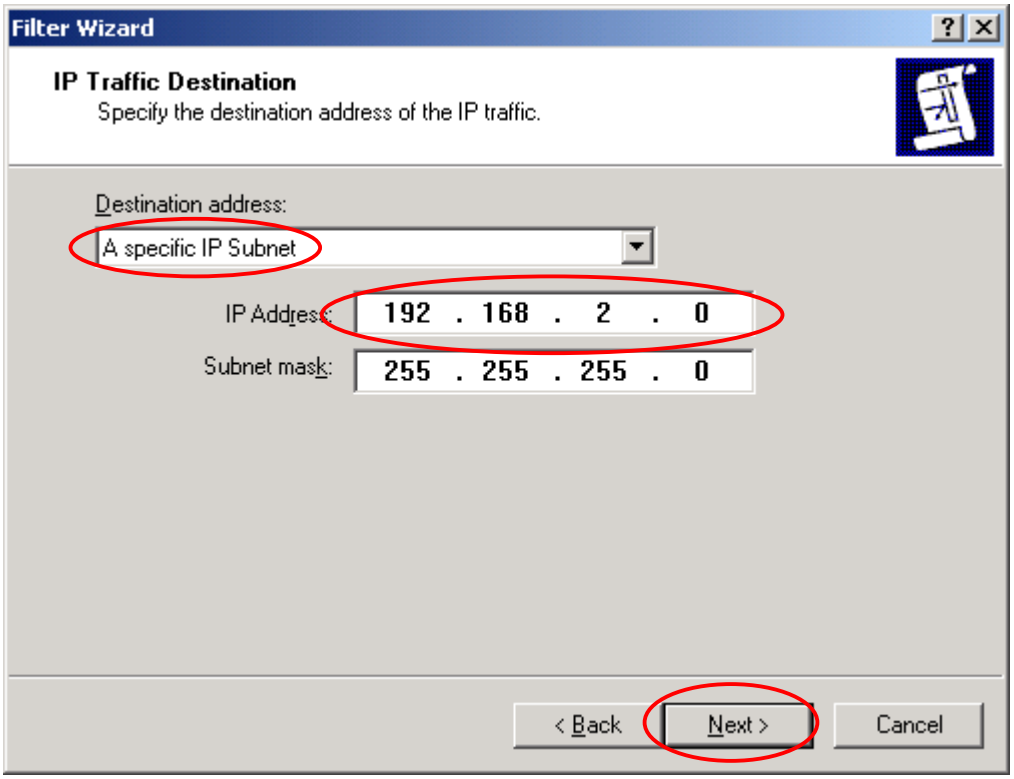
20. Click “**Next**.”



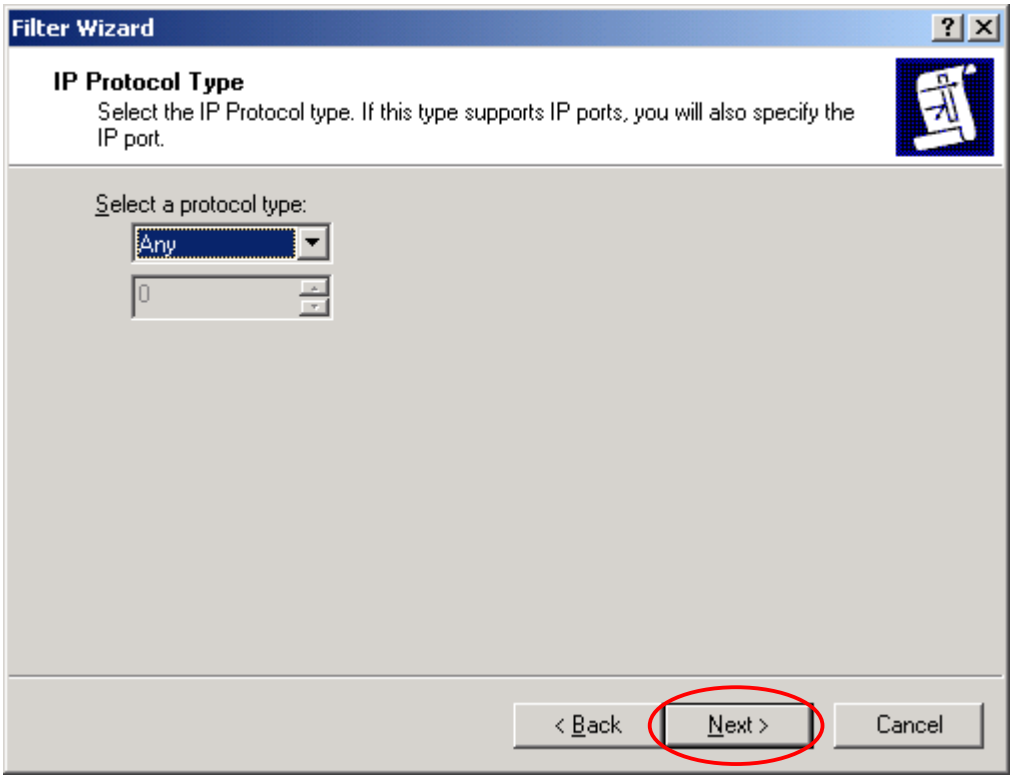
21. Select “**A specific IP Address**” and input Source IP address, and then click “**Next**.” (Ex: Windows XP Professional IP address 204.26.122.50)



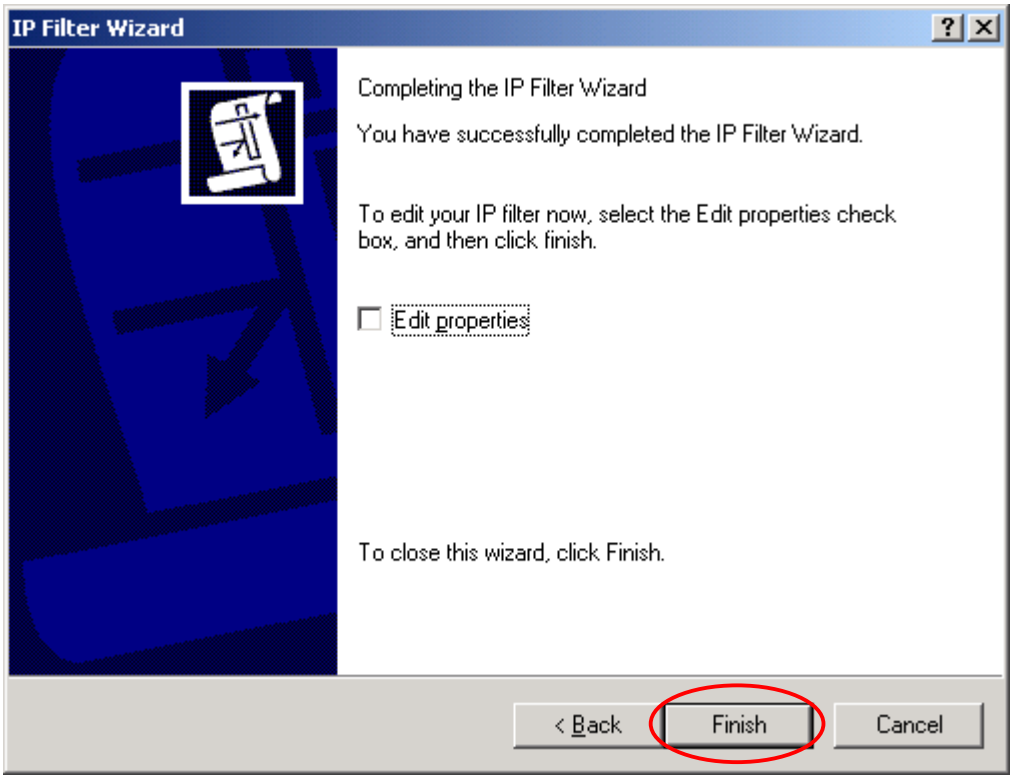
22. Select "**A specific IP Subnet**" and input destination IP address, and then click "**Next**." (Ex: RF550VPN Private network (LAN) 192.168.2.0)



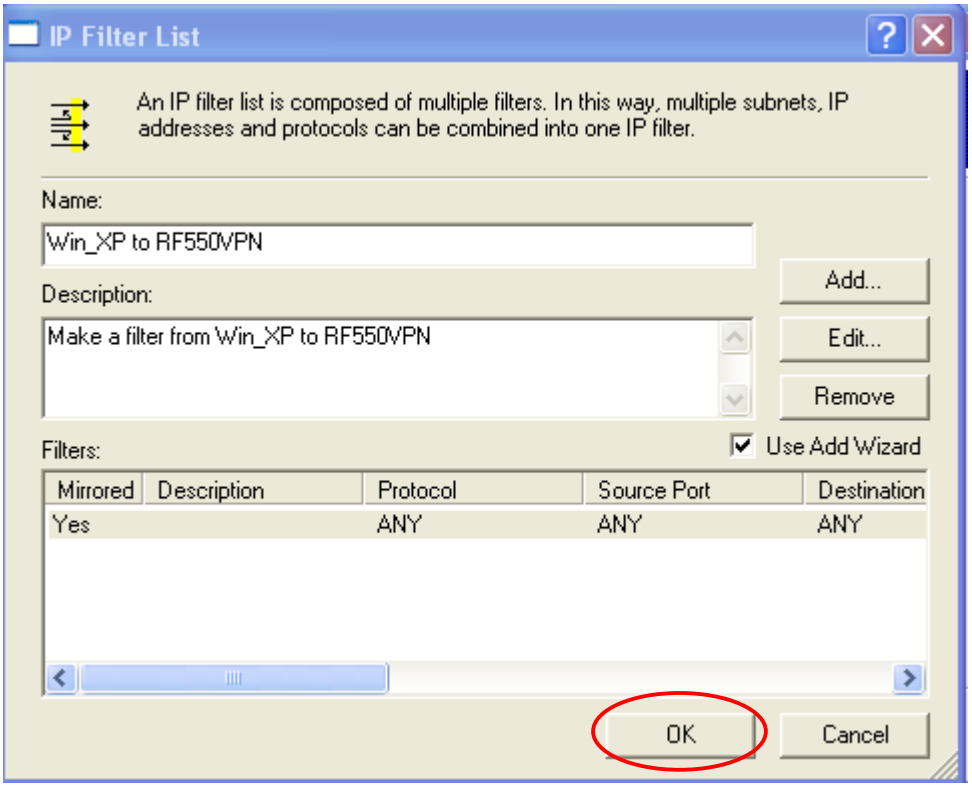
23. Click "**Next**."



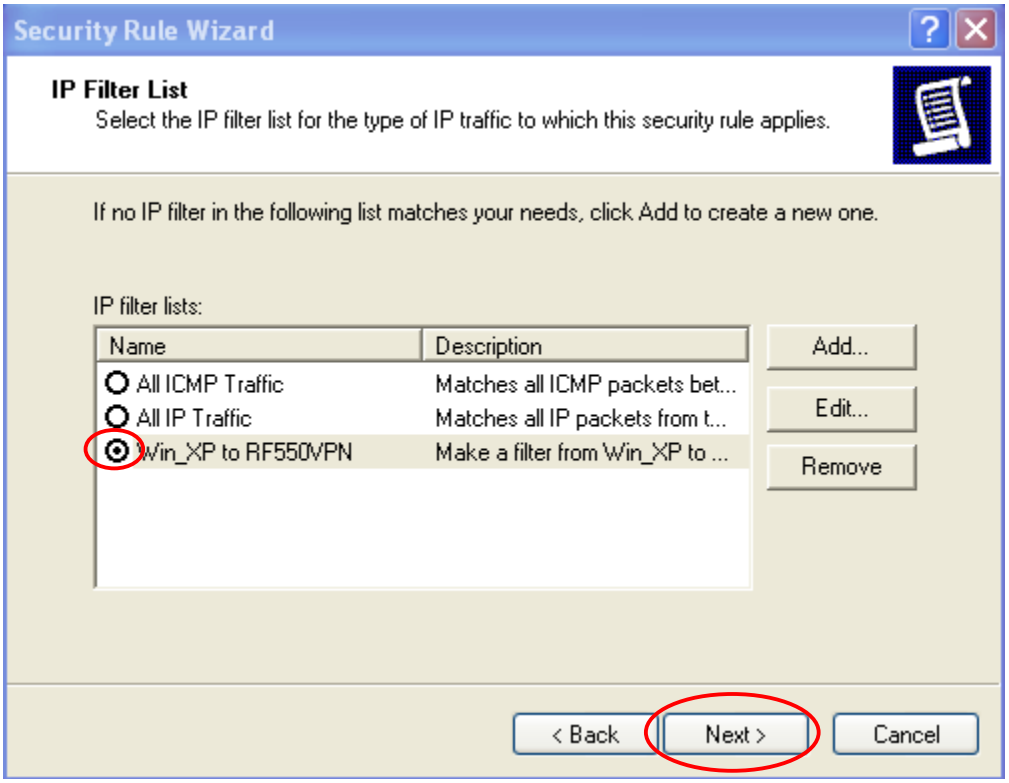
24. Click "**Finish**."



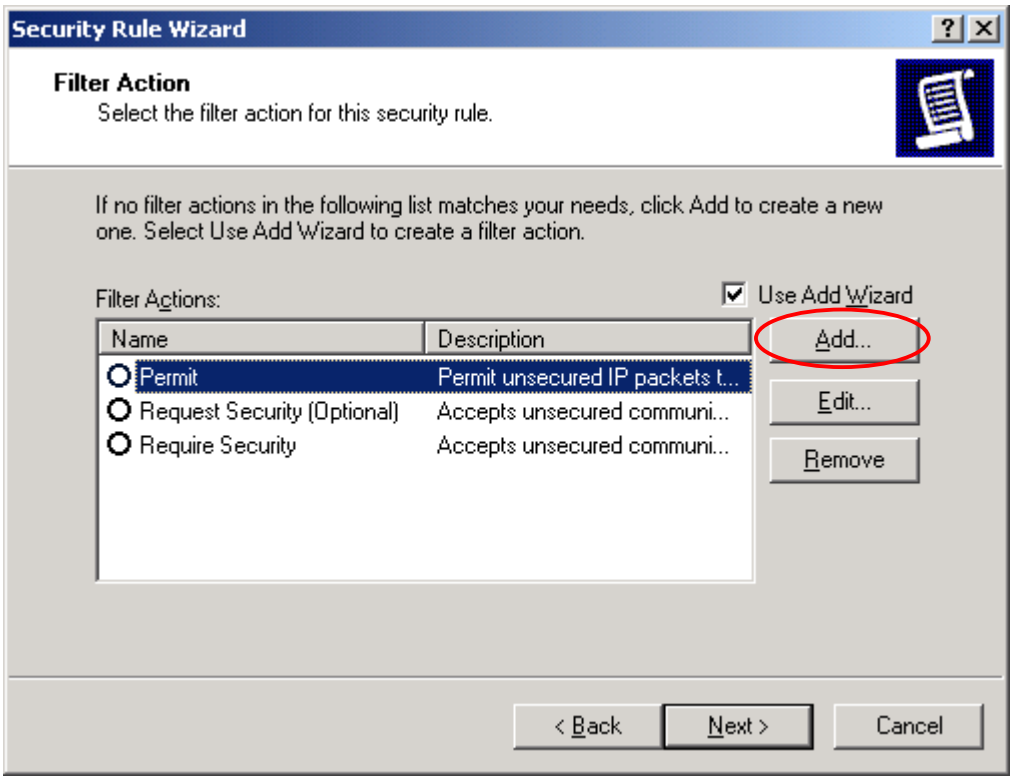
25. Click "**OK**."



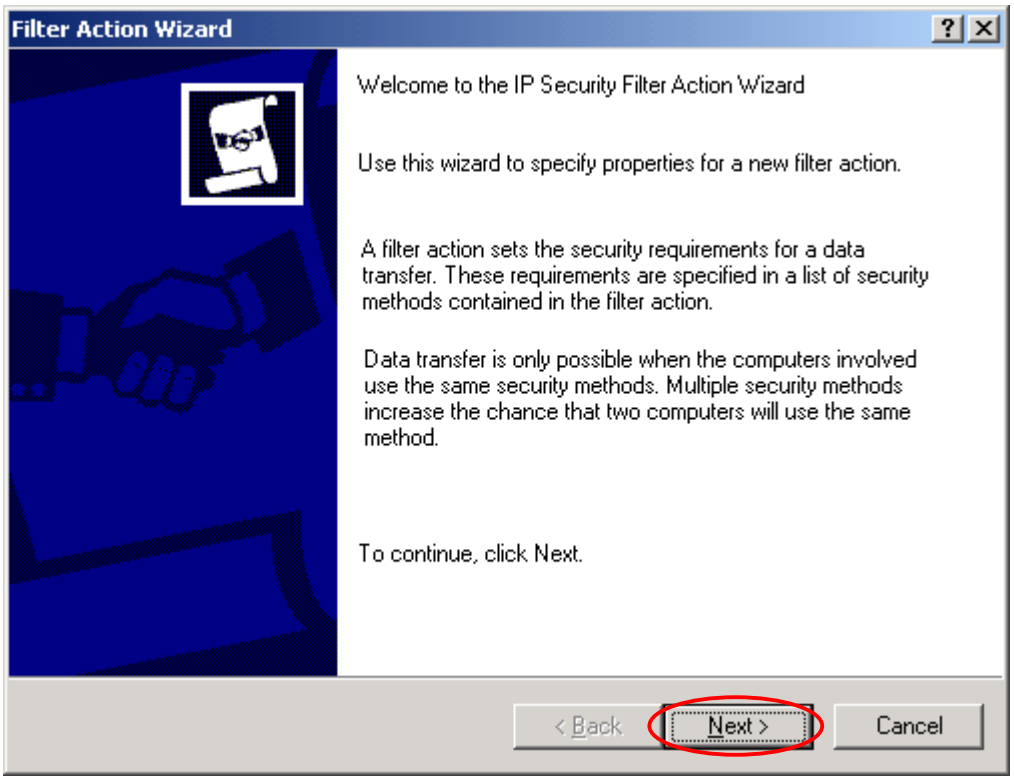
26. Choose "**Win_XP to RF550VPN**" and then click "**Next.**"



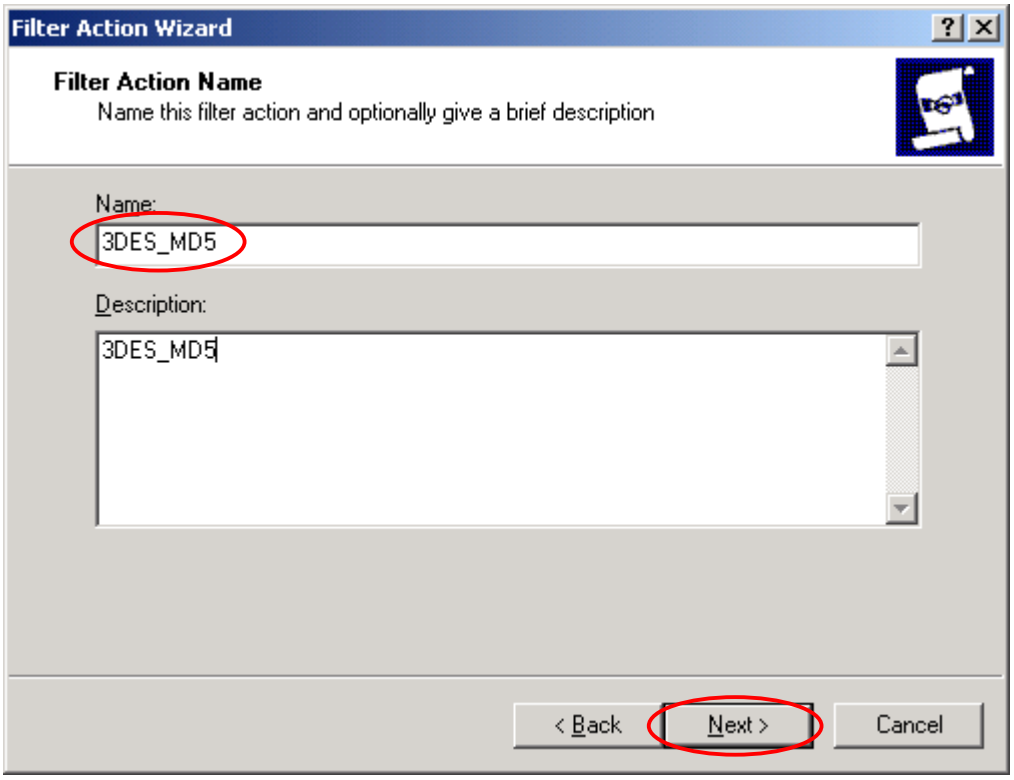
27. Click "**Add.**"



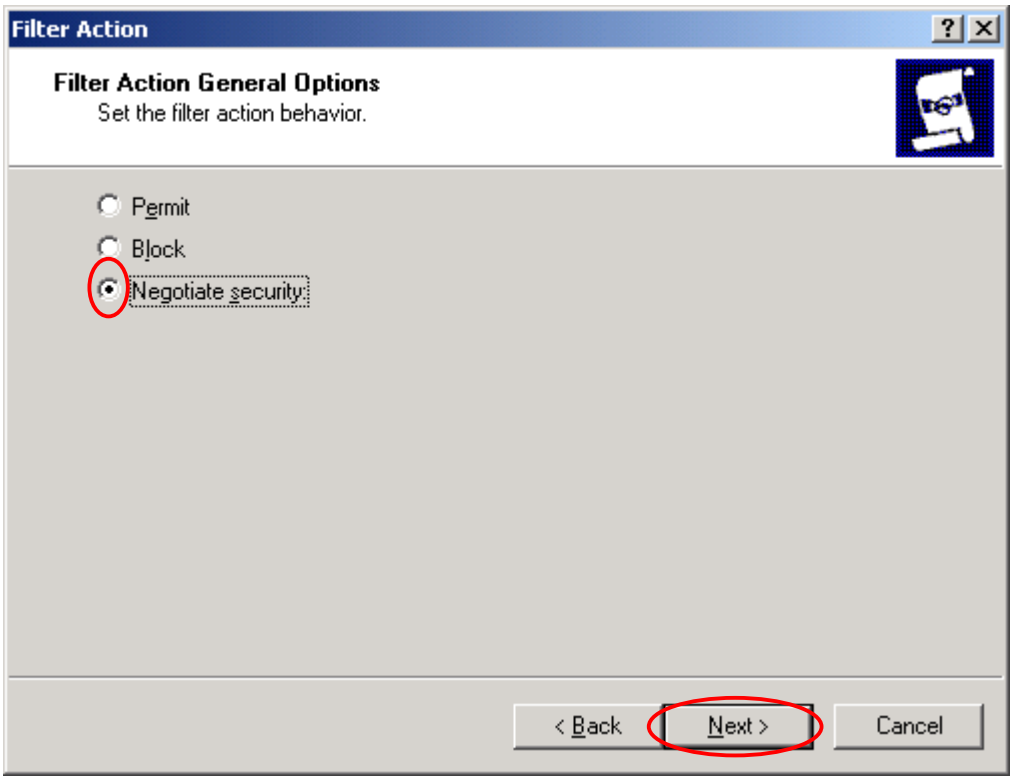
28. Click "**Next**."



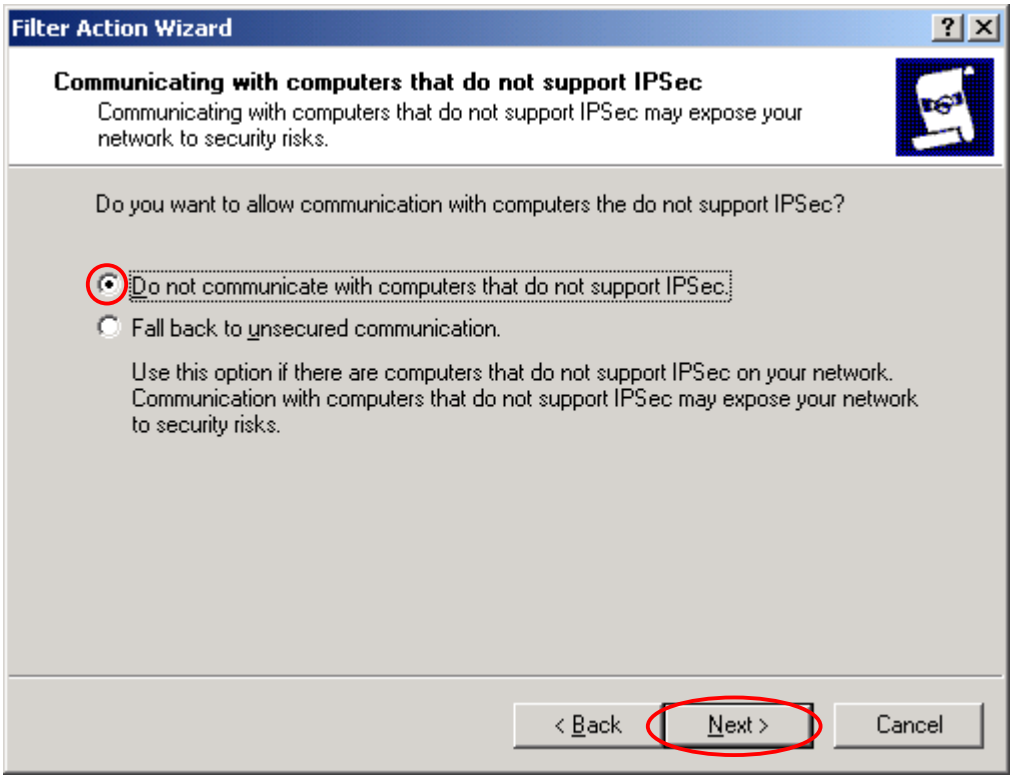
29. Type a filter action name and then click "**Next**." (Ex: 3DES_MD5)



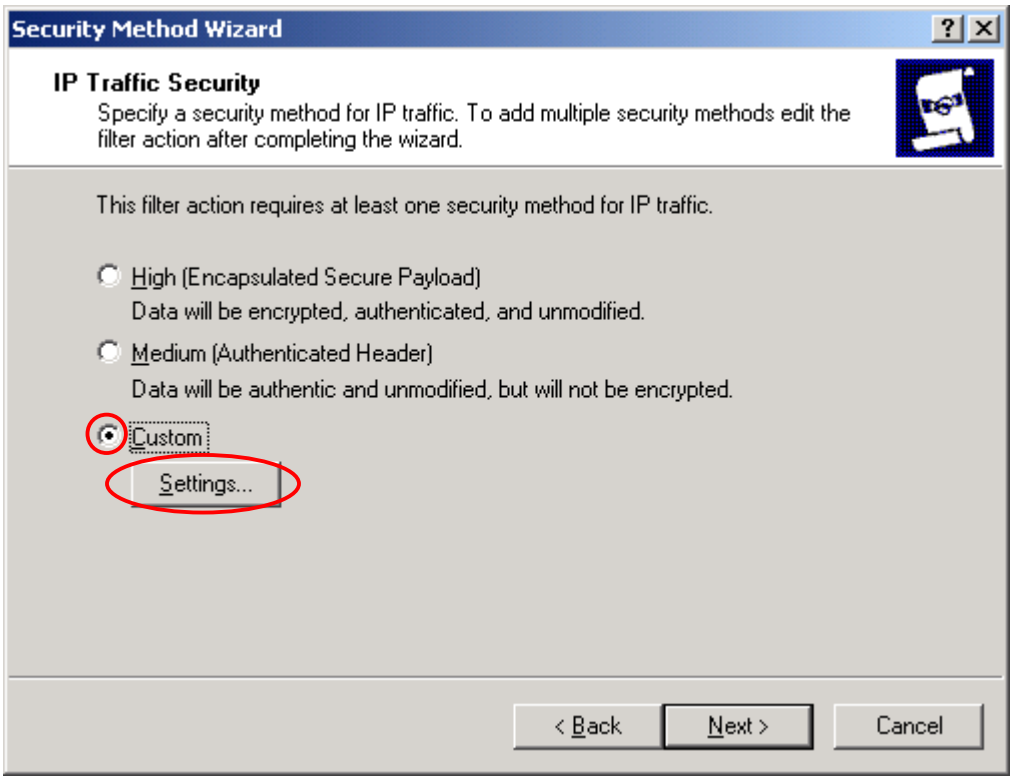
30. Choose "**Negotiate security**" and then click "**Next**."



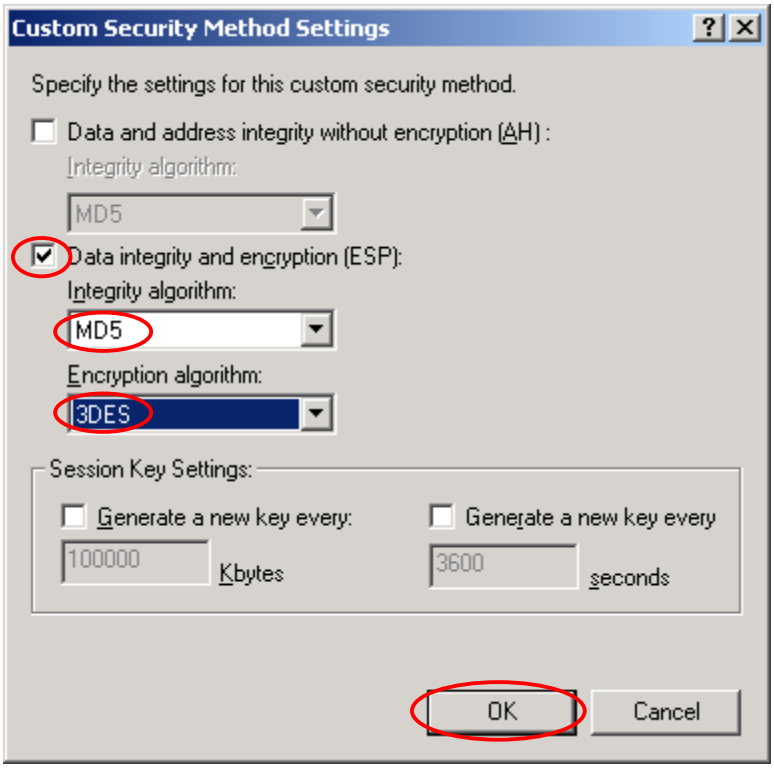
31. Choose "**Do not communicate with computer that do not support IPSec**" and then click "**Next**."



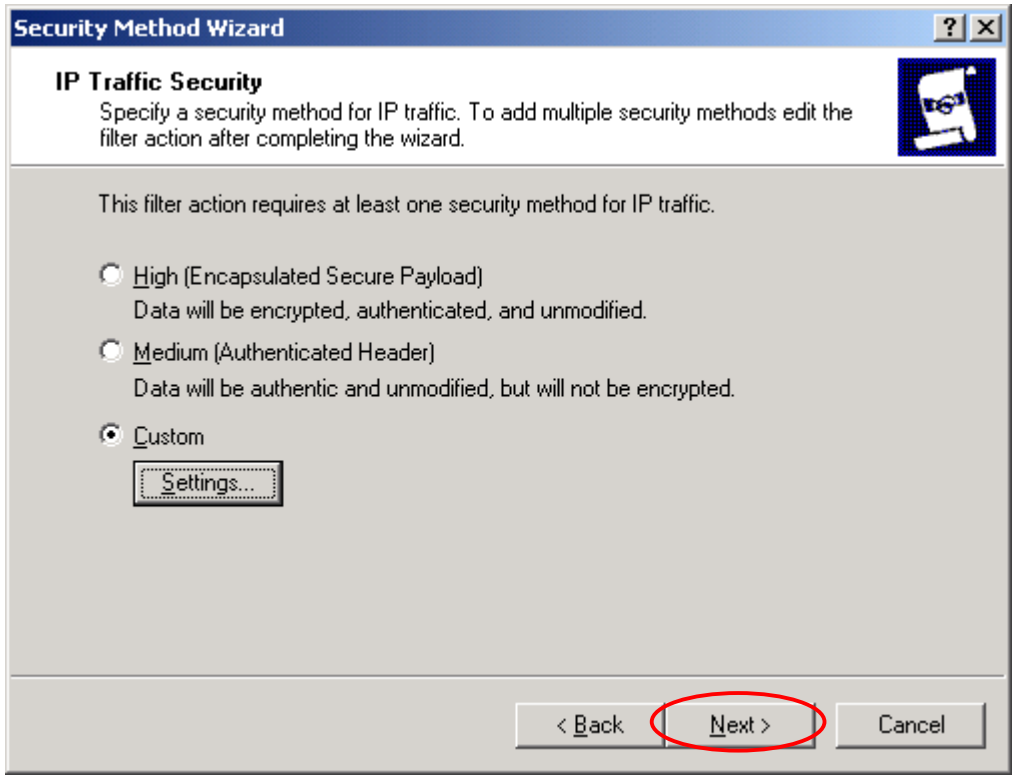
32. Choose "**Custom**" and then click "**Settings**."



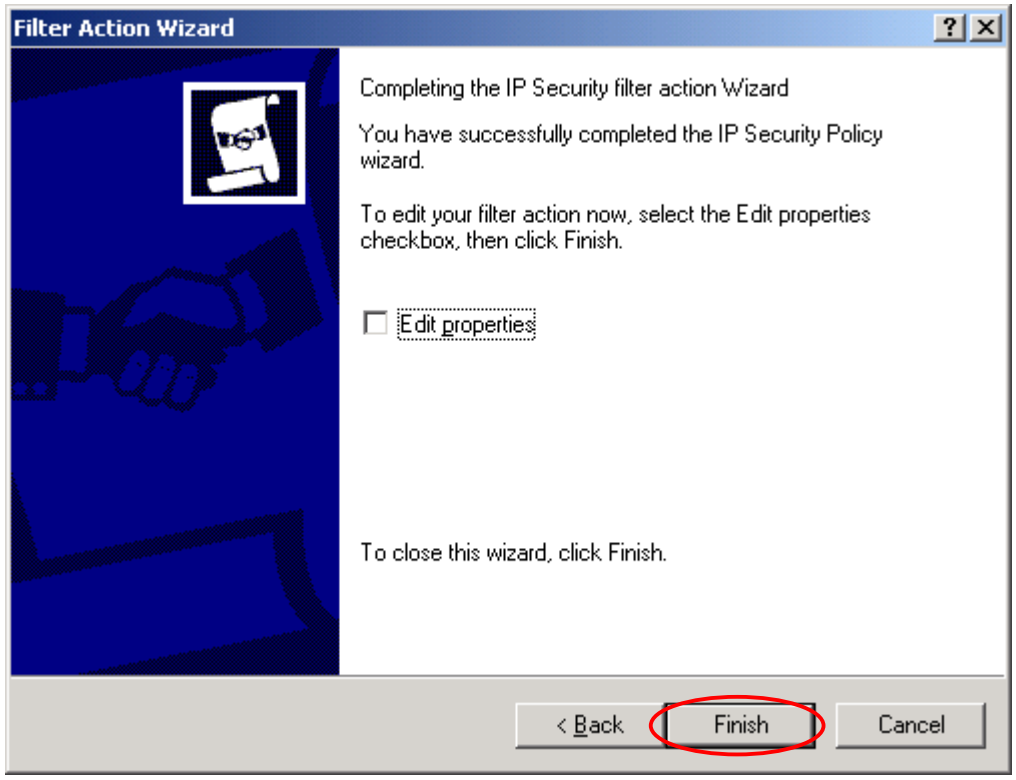
33. Check "**Date integrity and encryption (ESP)**", select "**Integrity algorithm (MD5)**" and "**Encryption algorithm (3DES)**", and then click "**OK**."



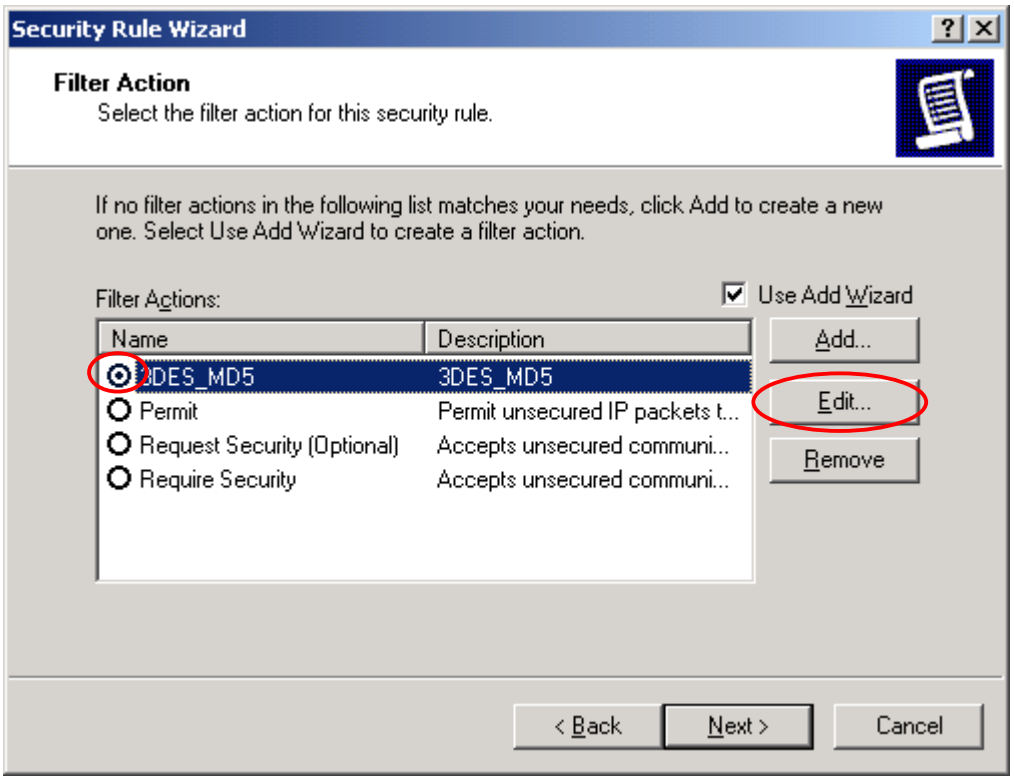
34. Click "**Next**."



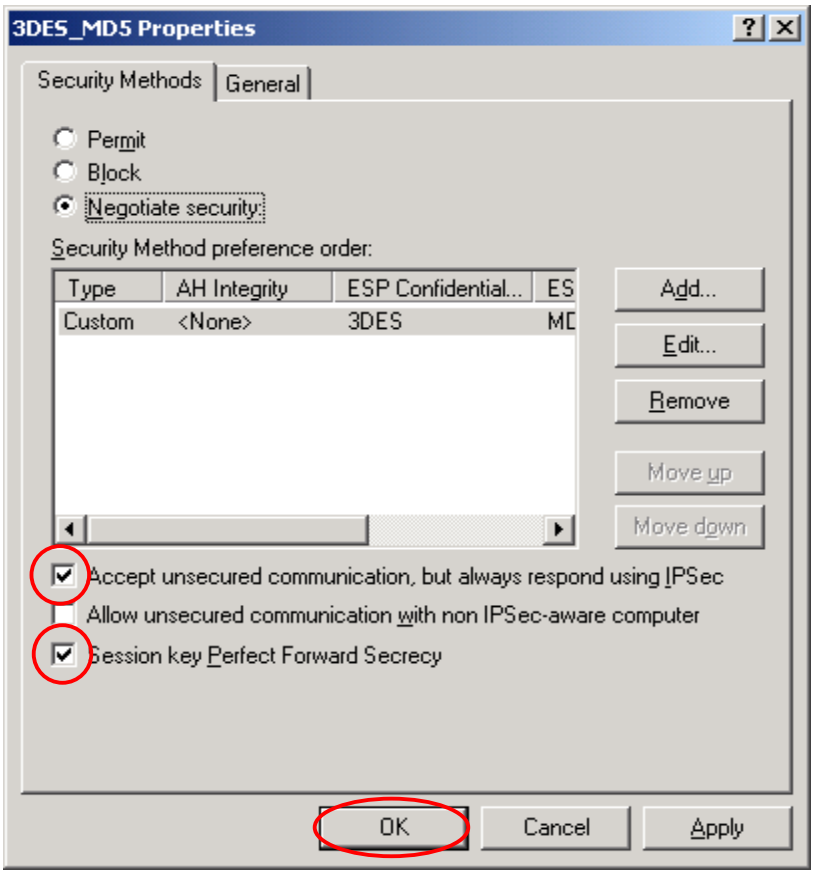
35. Click "**Finish**."



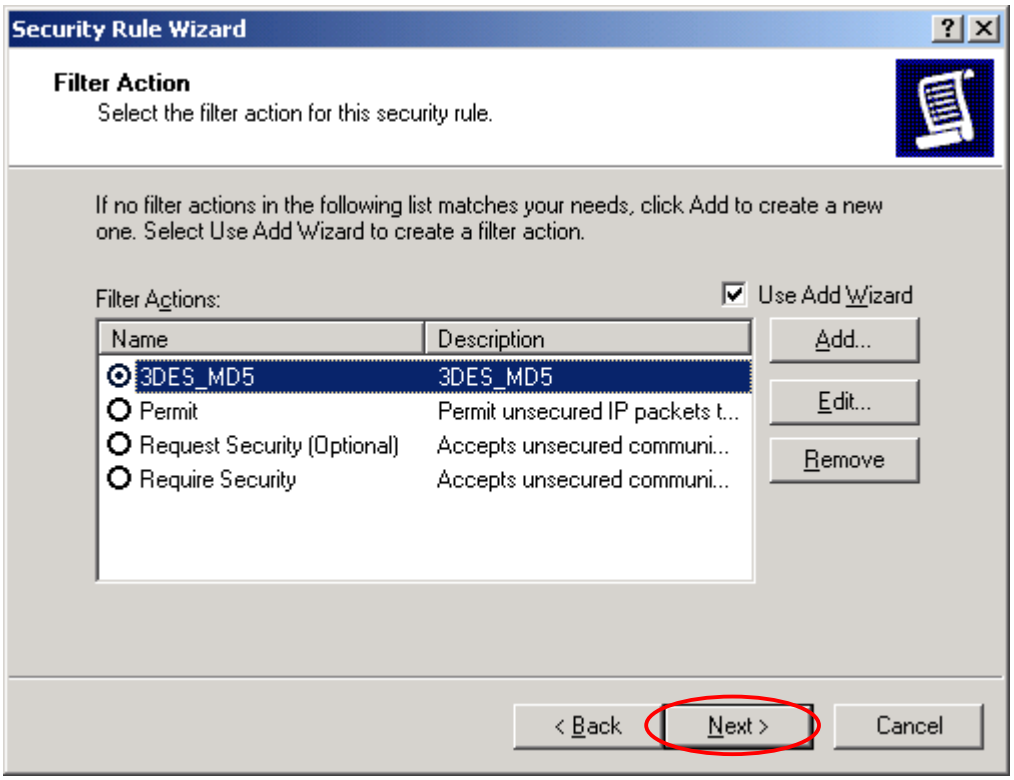
36. Select "**3DES_MD5**" and then click "**Edit**."



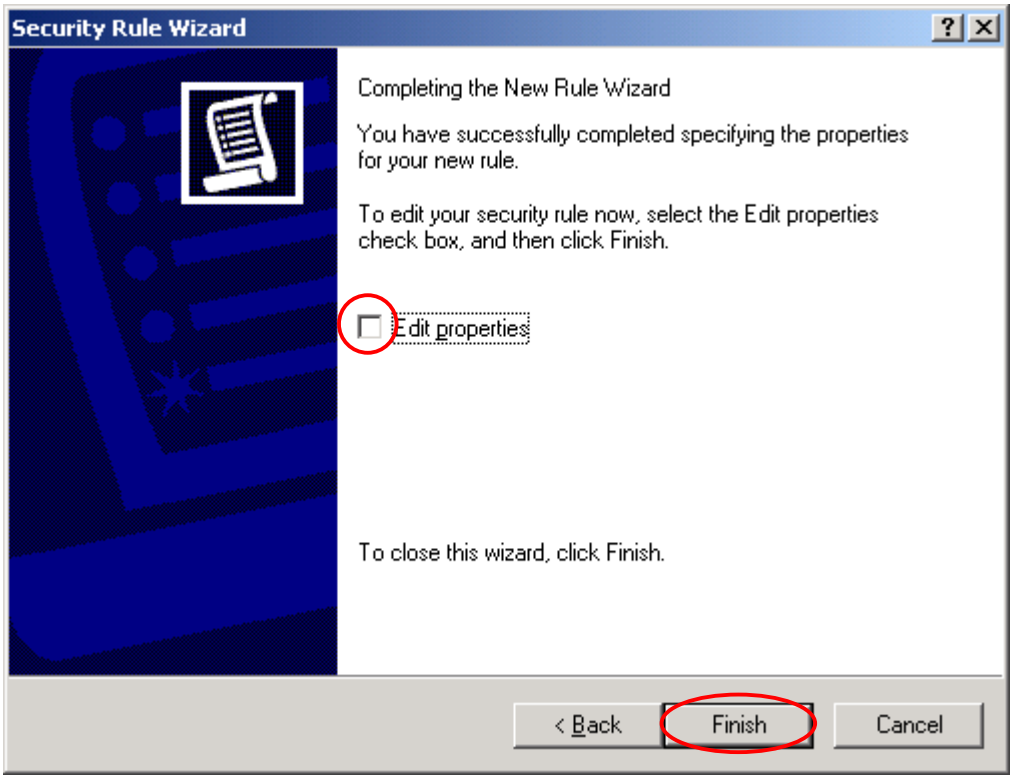
37. Check “**Accept unsecured communications**” and “**Session key Perfect Forward Secrecy**” and then click “**OK**.”



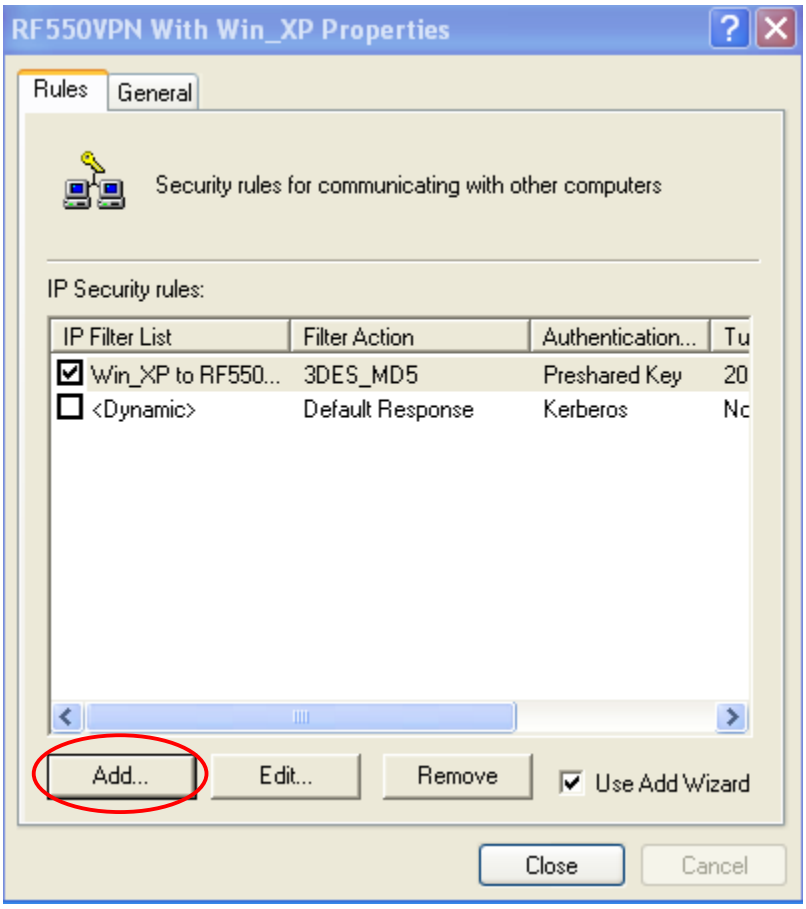
38. Click "**Next**."



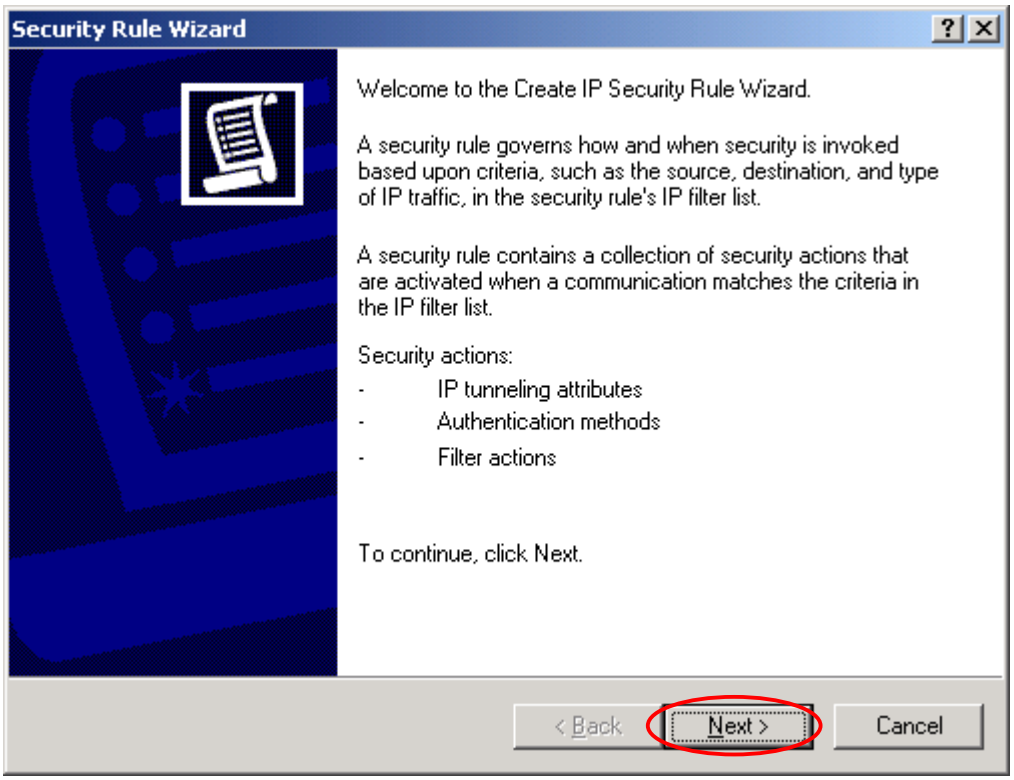
39. Uncheck "**Edit properties**" and click "**Finish**."



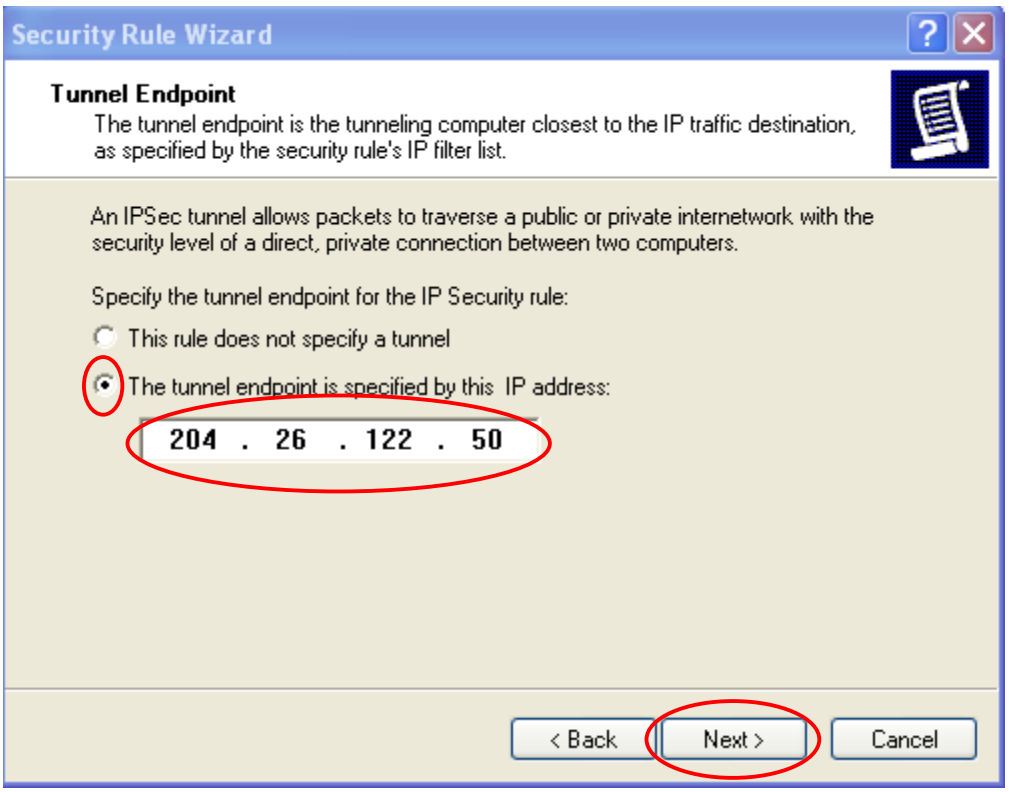
40. Click "**Add**."


RF550VPN With Win_XP Properties
Rules
General
Security rules for communicating with other computers
IP Security rules:
IP Filter List
Filter Action
Authentication...
Tu
Win_XP to RF550...
3DES_MD5
Preshared Key
20
<Dynamic>
Default Response
Kerberos
Nc
Add...
Edit...
Remove
Use Add Wizard
Close
Cancel

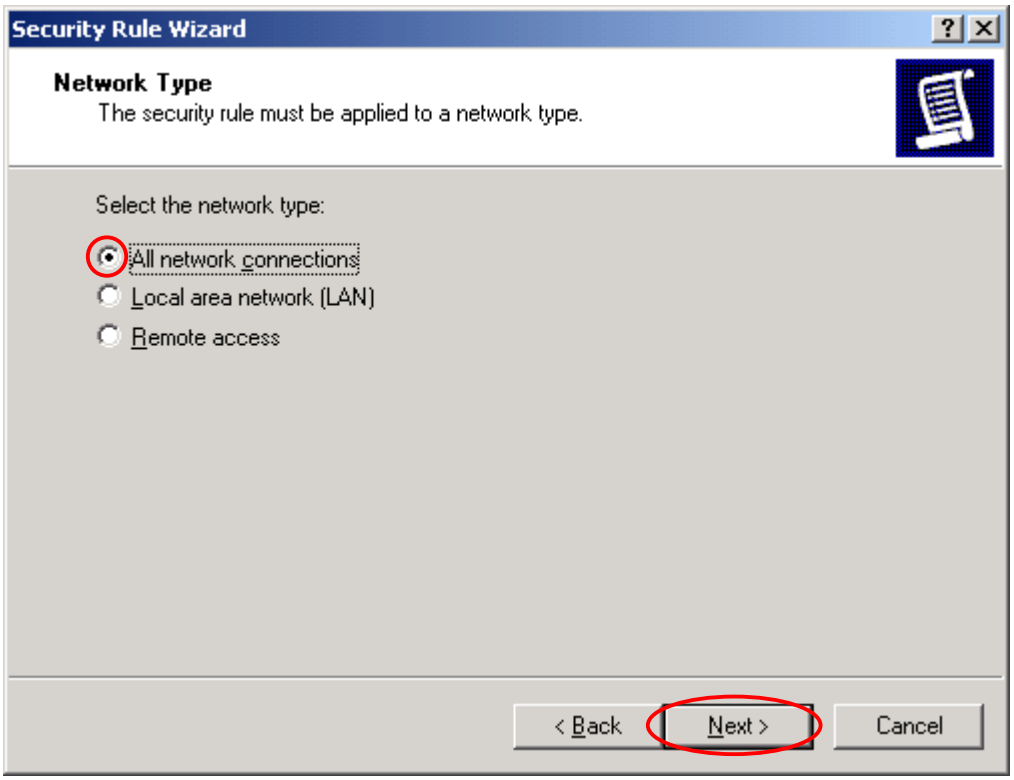
41. Click "**Next**."



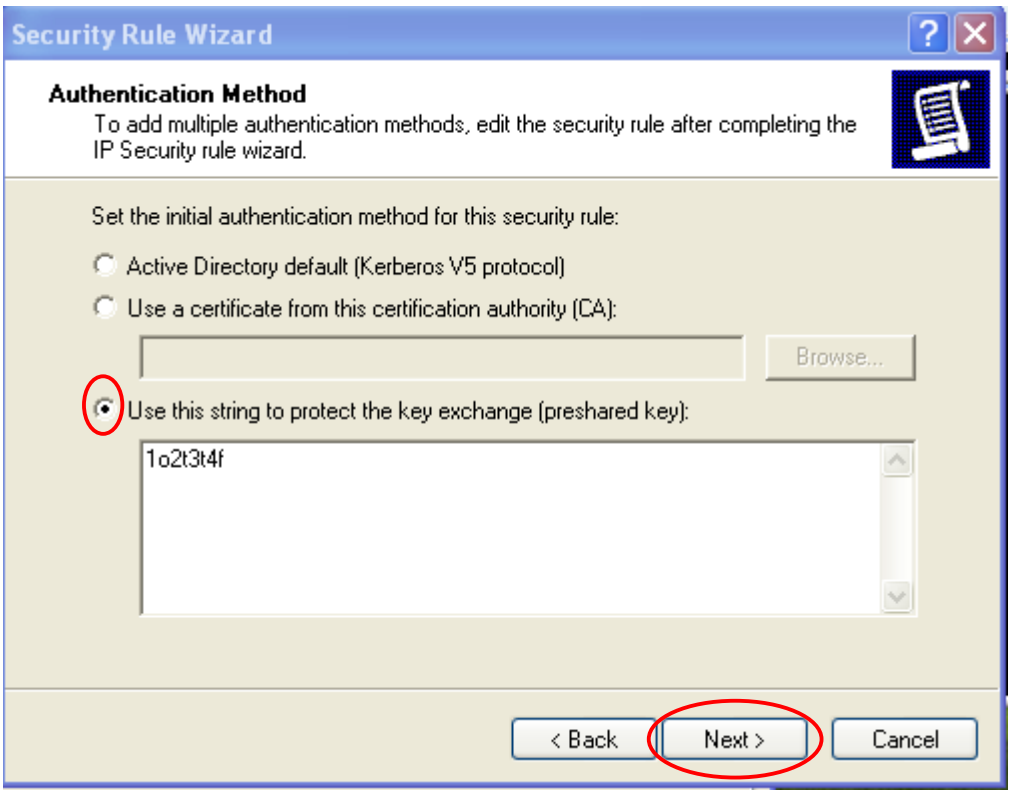
42. Input IP Address into "**The tunnel endpoint specified by this IP address:**" and then click "**Next**." (Ex: Windows XP Professional IP Address 204.26.122.50)



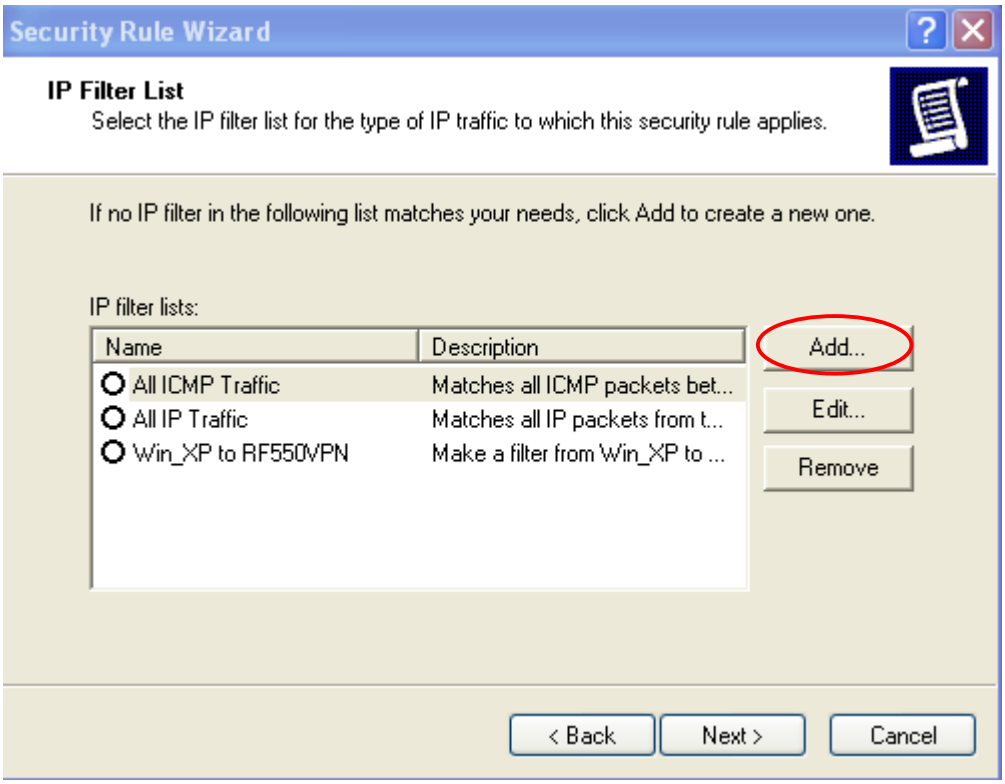
43. Choose "**All network connections**" and then click "**Next**."



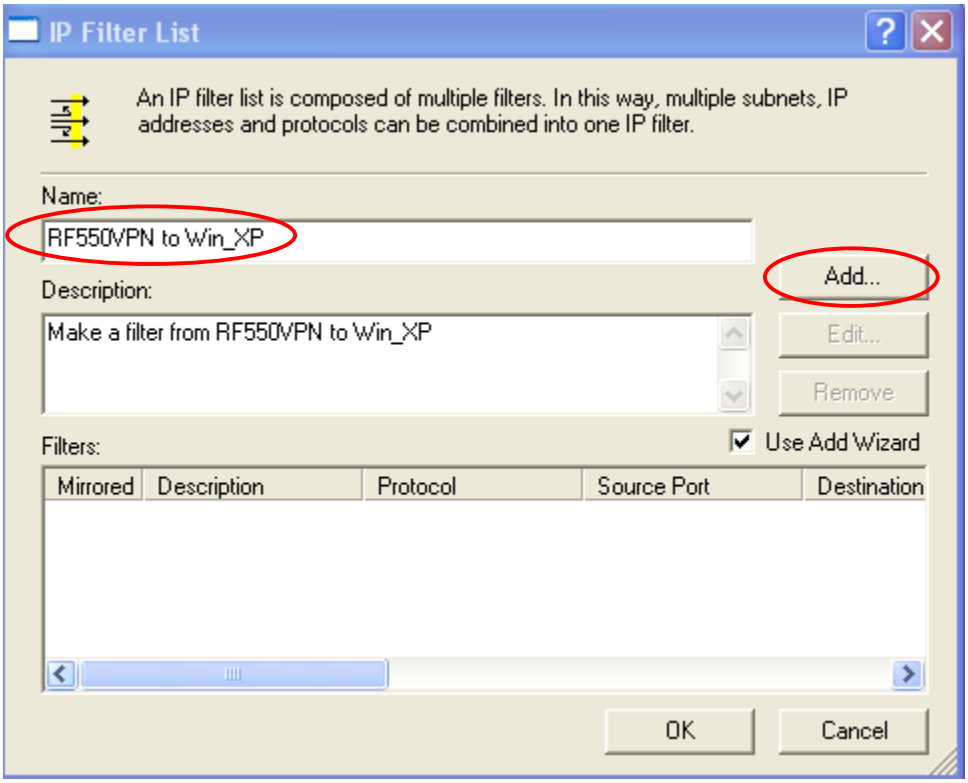
44. Choose "**Use this string to protect the key exchange (preshared key)**" and then click "**Next**." (Ex: RF550VPN preshared key 1o2t3t4f)



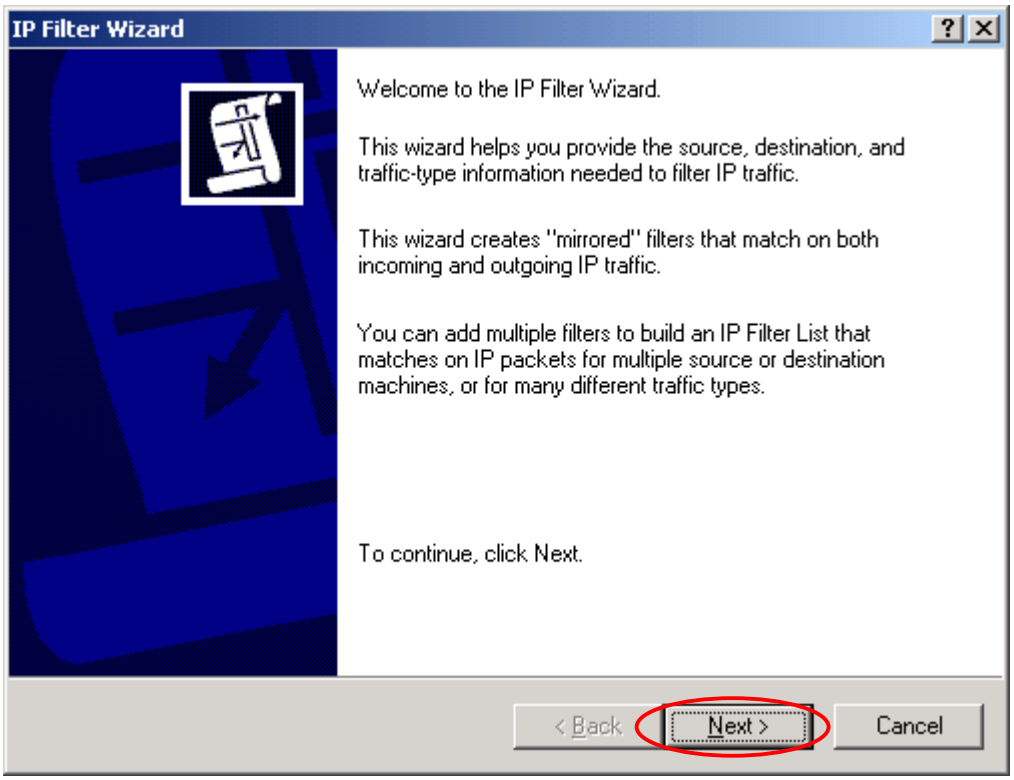
45. Click "**Add**."



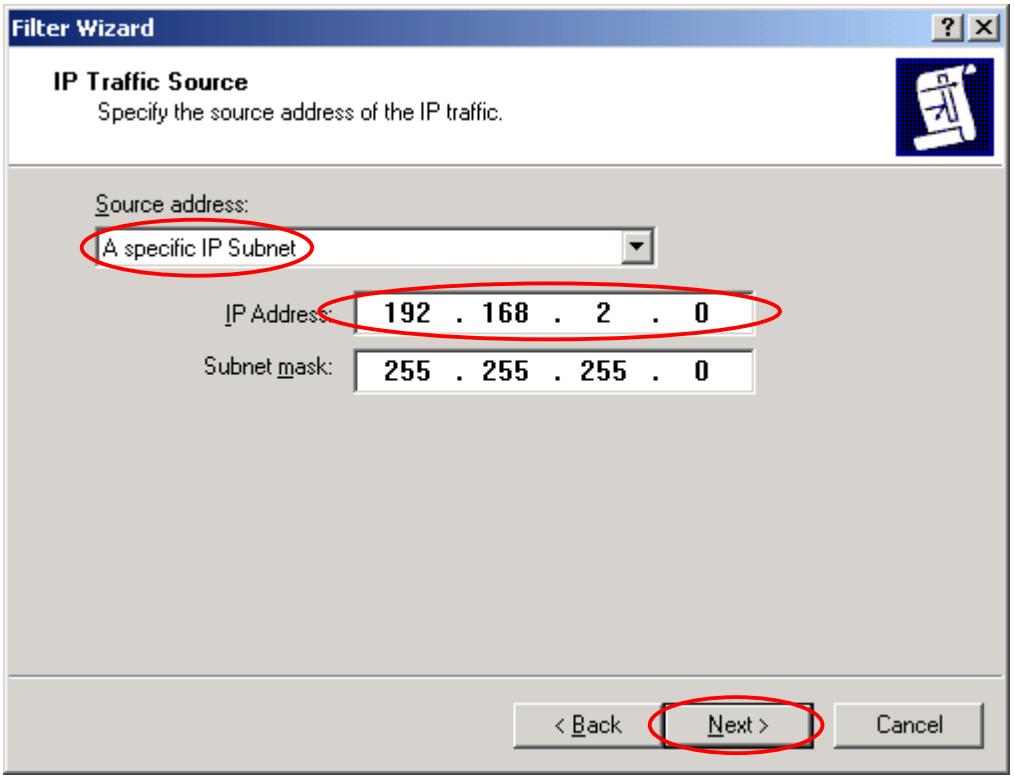
46. Type a filter name and description and then click "**Add**."



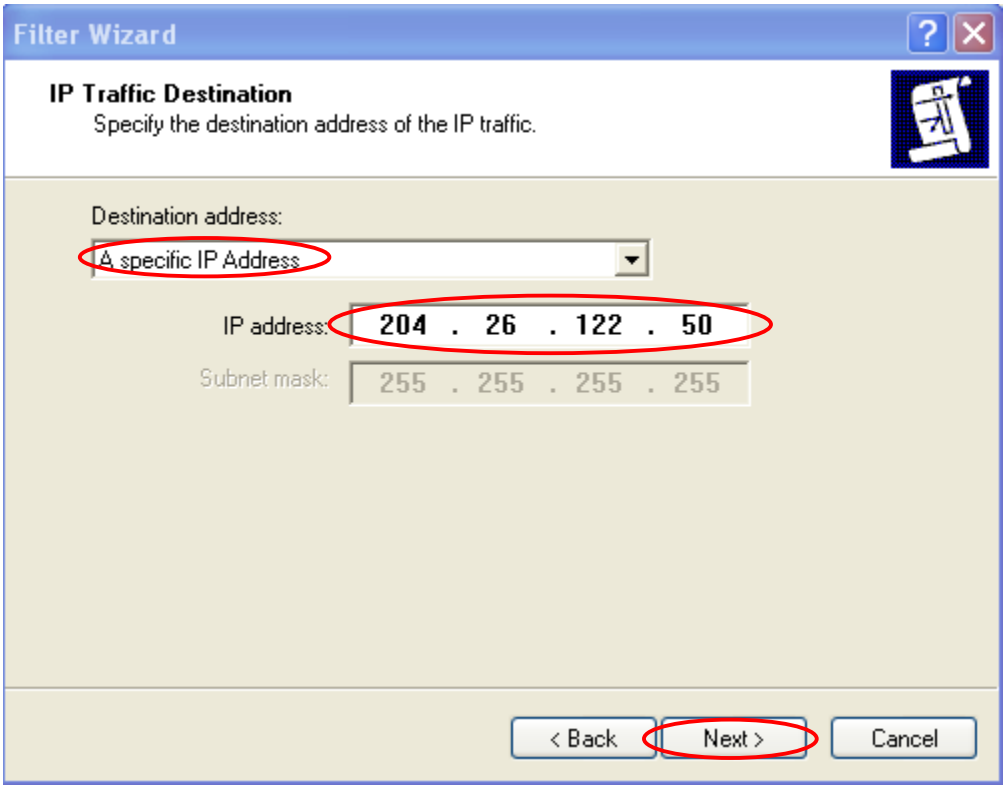
47. Click “**Next**.”



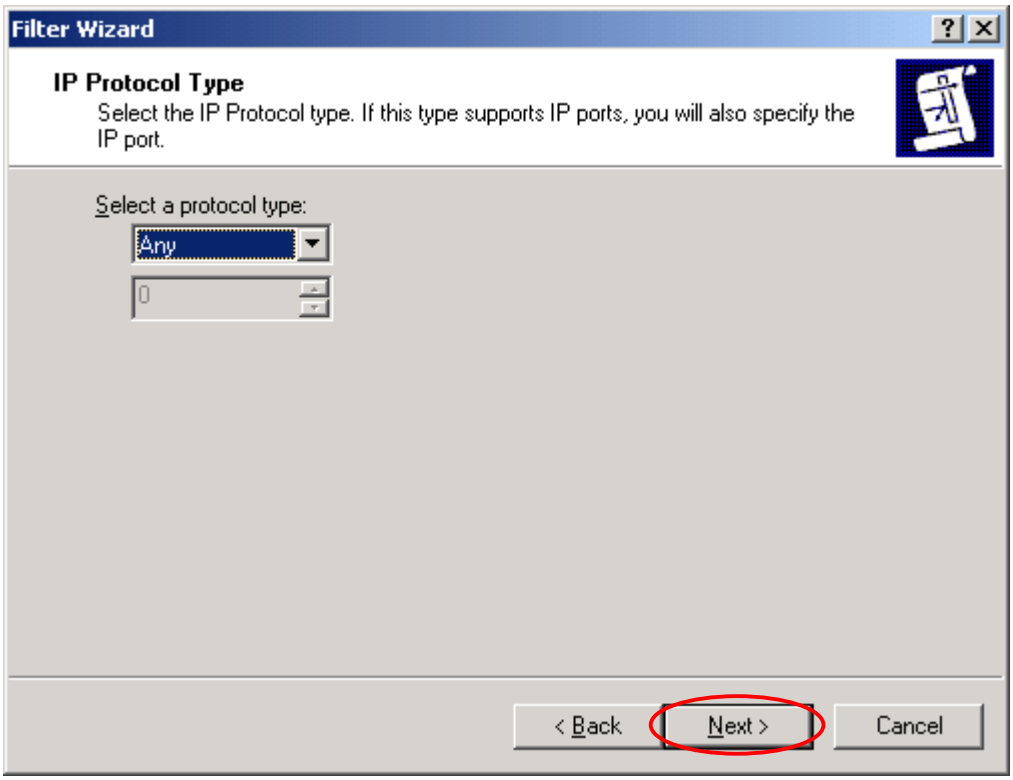
48. Select “**A specific IP Subnet**” and input Source address and then click “**Next**.” (Ex: RF550VPN Private network(LAN) 192.168.2.0)



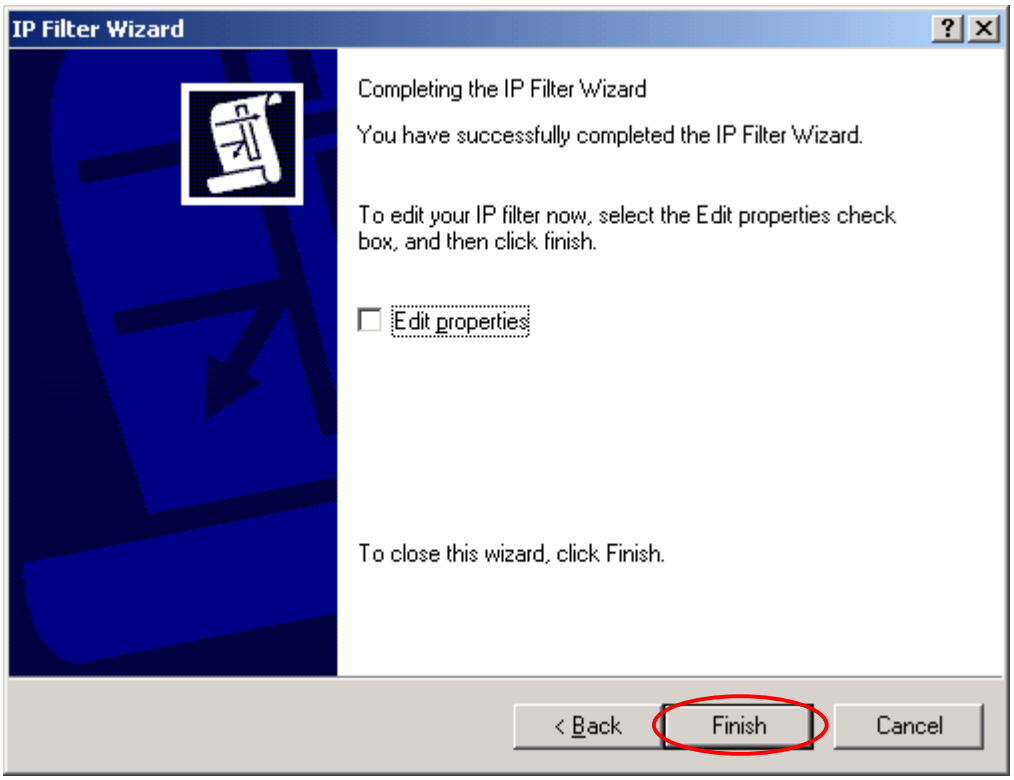
49. Select "**A specific IP Address**" and input destination IP address and then click "**Next**." (Ex: Windows XP Professional IP address 204.26.122.50)



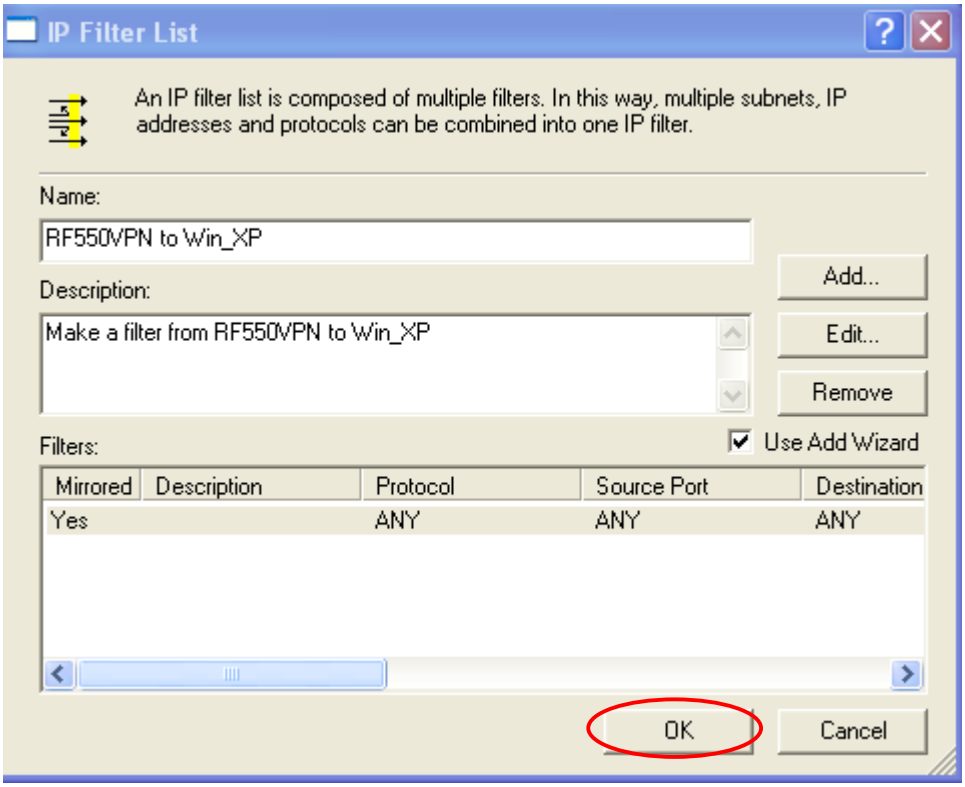
50. Click "**Next**."



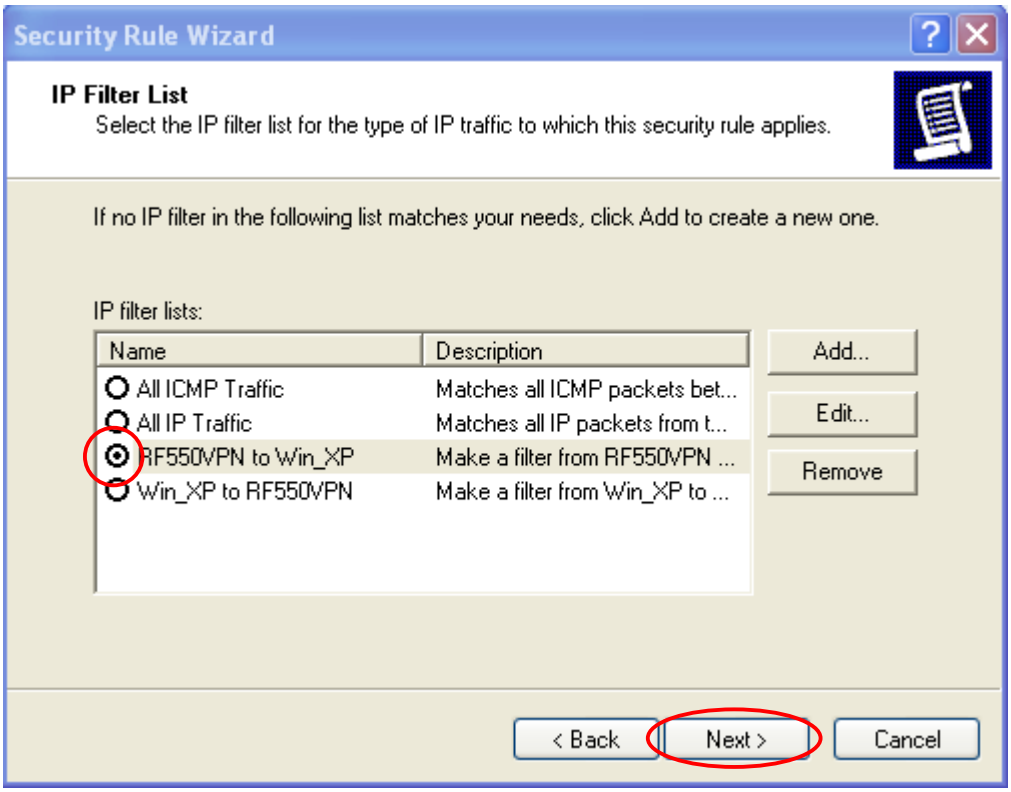
51. Click "**Finish**."



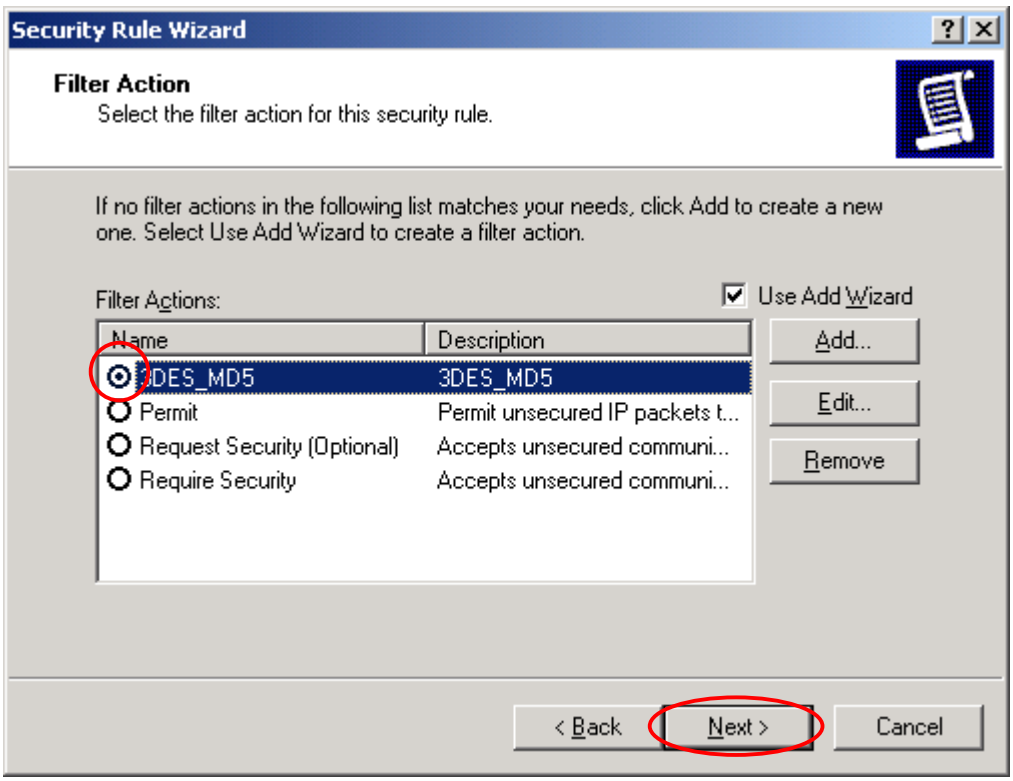
52. Click "**OK**."



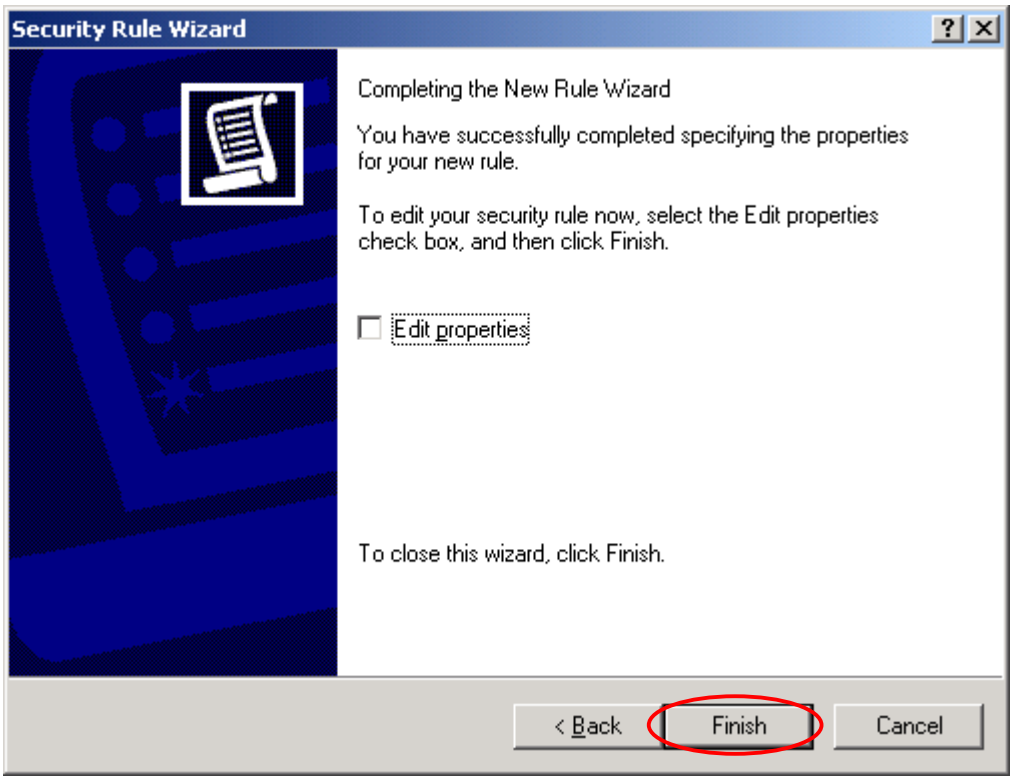
53. Select "**RF550VPN to Win_XP**" and then click "**Next**."



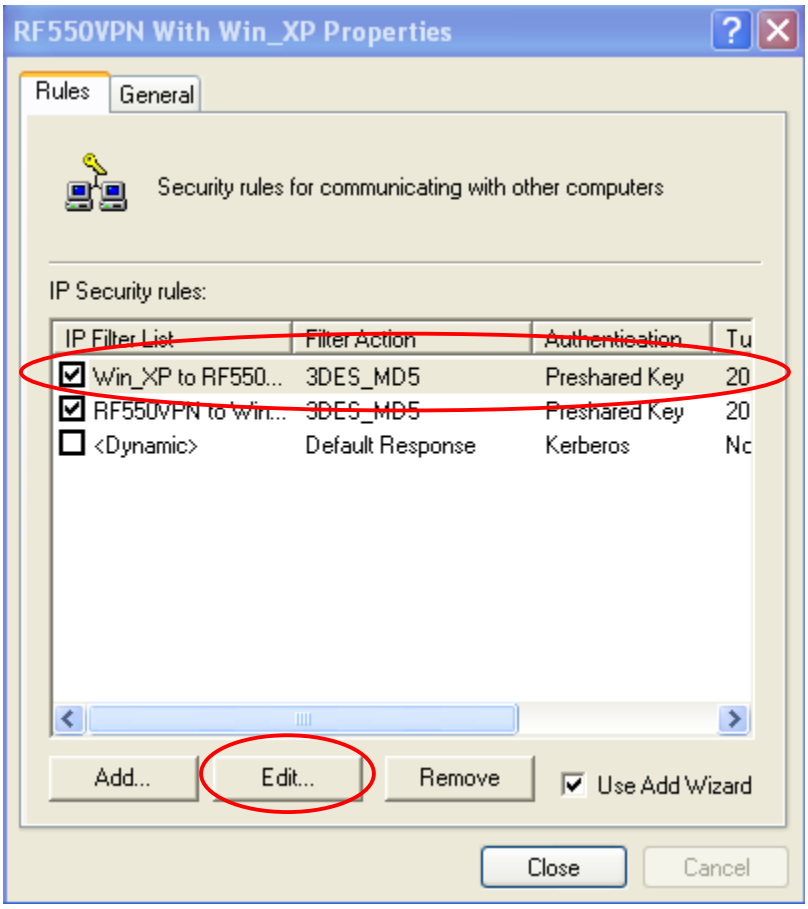
54. Choose "**3DES_MD5**" and then click "**Next**."



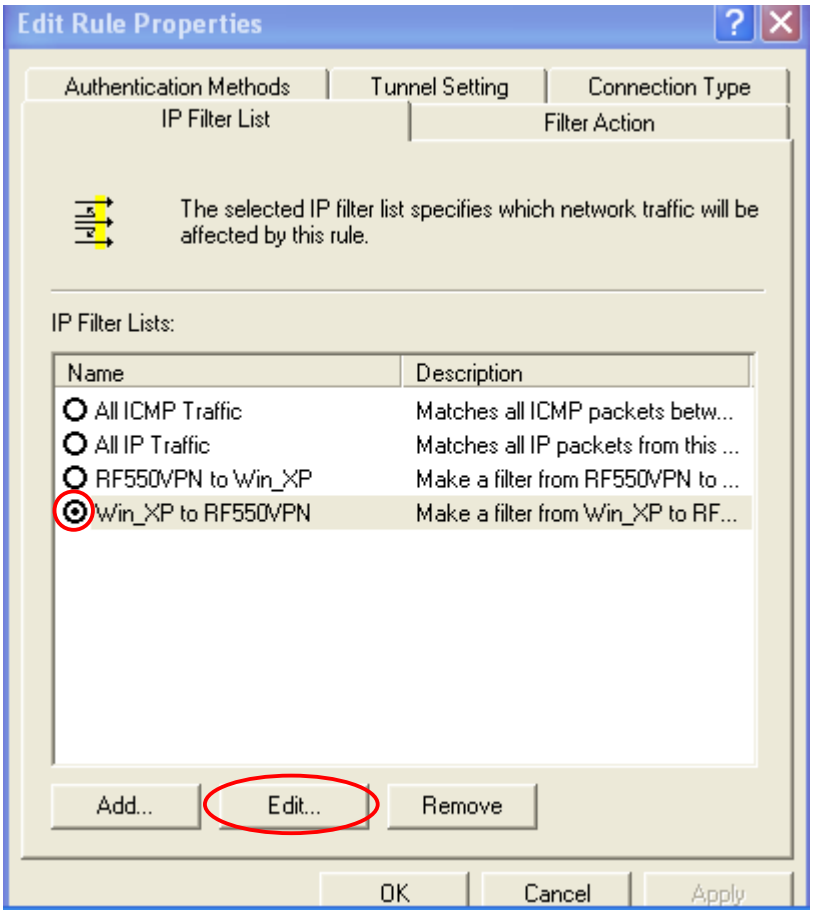
55. Click "**Finish**."



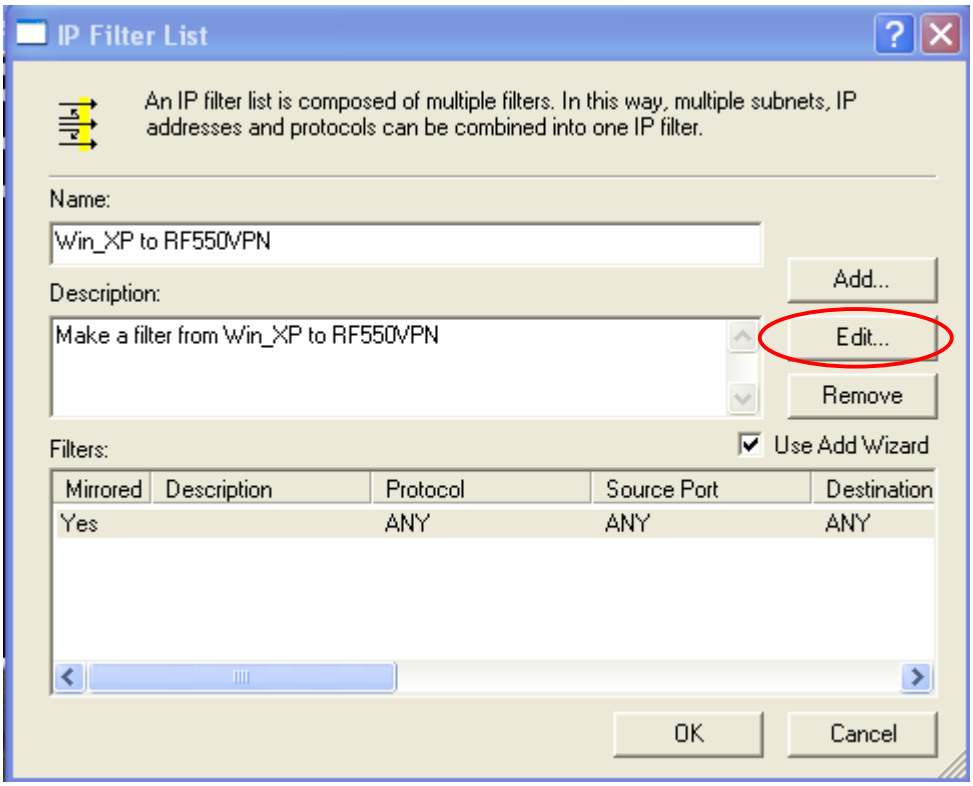
56. Highlight "**Win_XP to RF550VPN**" and then click "**Edit**."



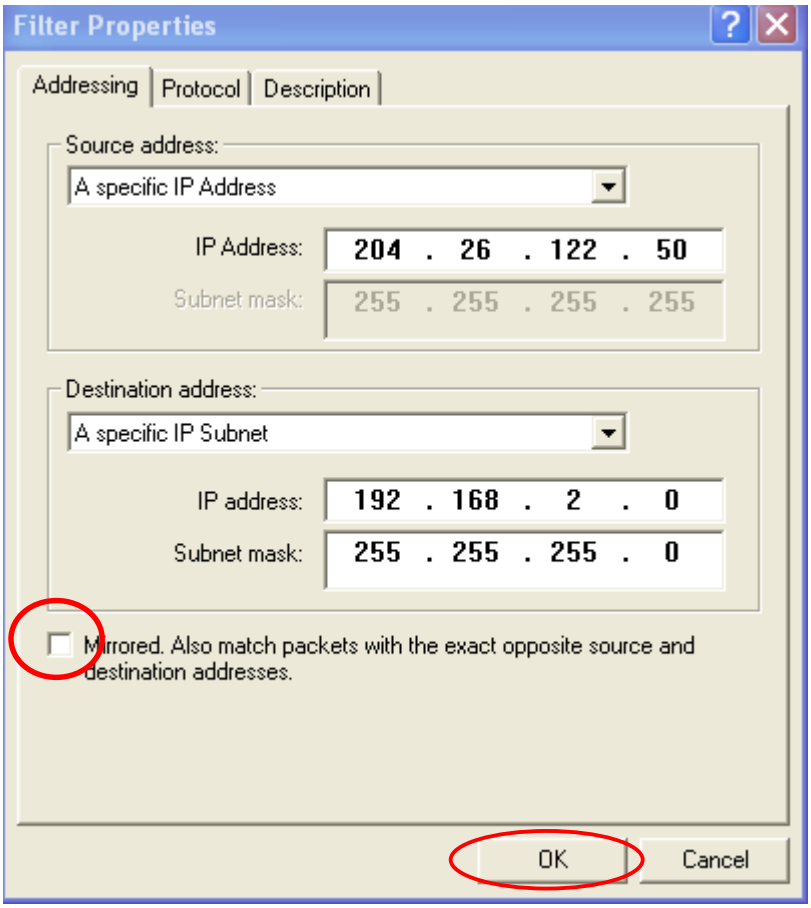
57. Select “**Win_XP to RF550VPN**” and then click “**Edit**.”



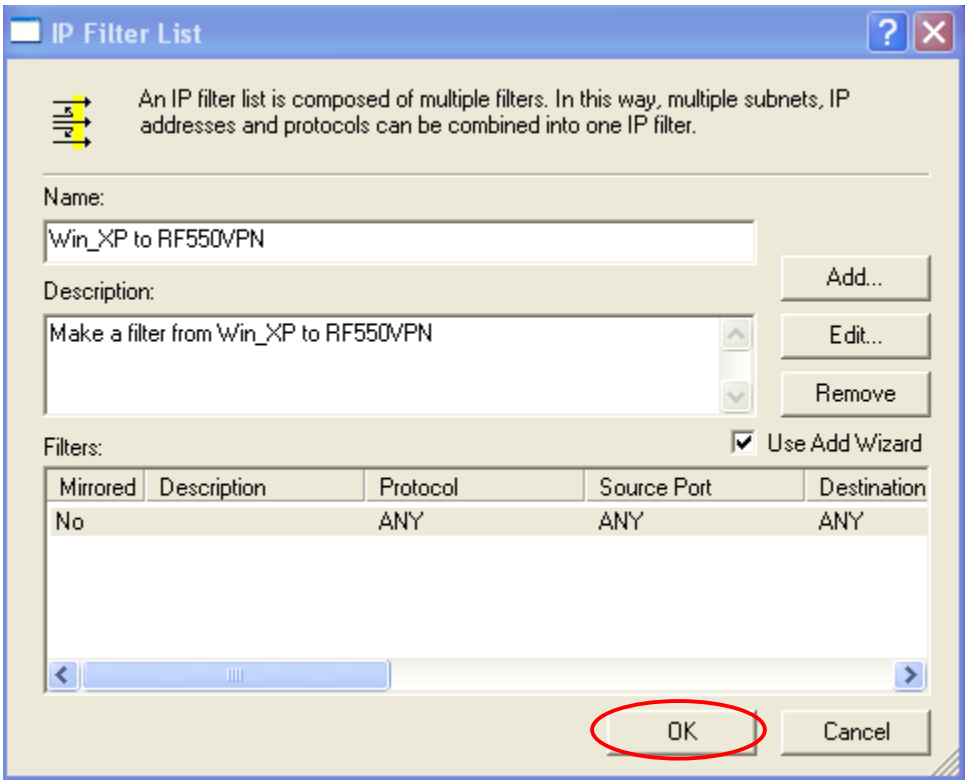
58. Click "**Edit**."



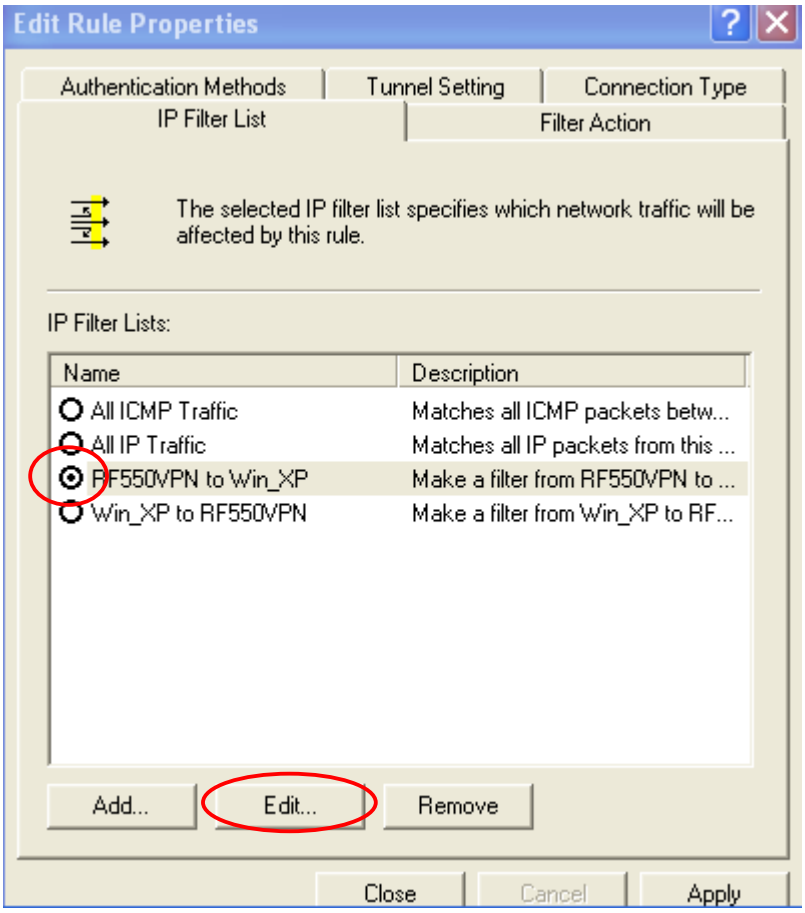
59. Uncheck "**Mirrored. Also match packets with exact opposite source and destination address**" and then click "**OK**."



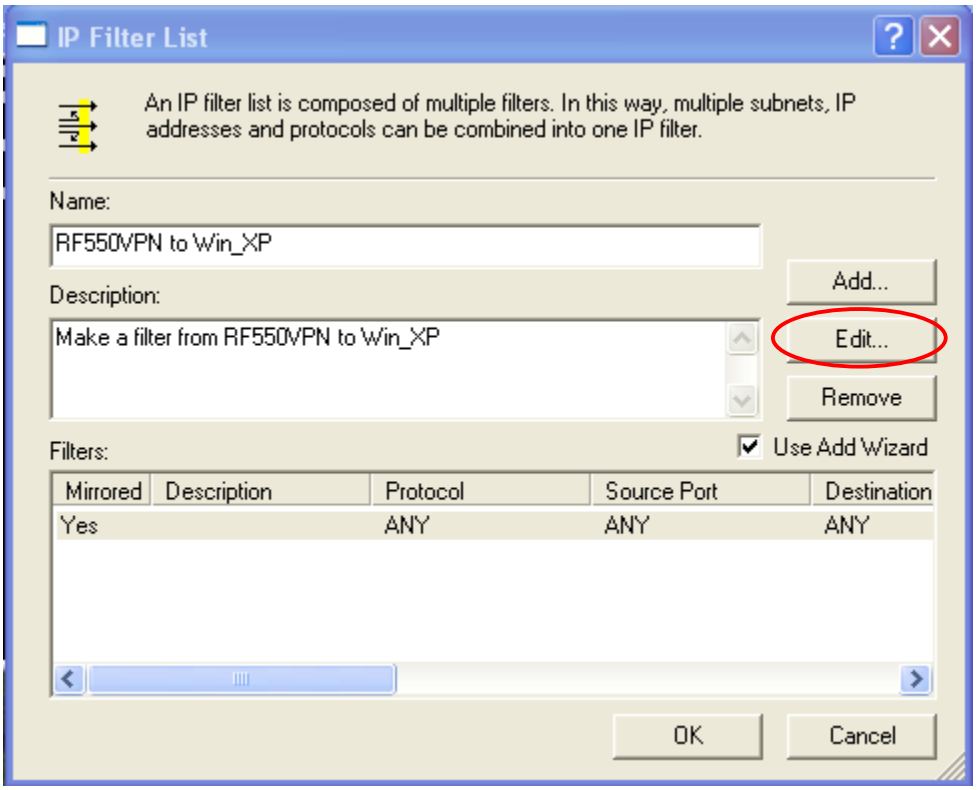
60. Click "**OK**."


IP Filter List
An IP filter list is composed of multiple filters. In this way, multiple subnets, IP addresses and protocols can be combined into one IP filter.
Name:
Win_XP to RF550VPN
Description:
Make a filter from Win_XP to RF550VPN
Add...
Edit...
Remove
Filters:
Use Add Wizard
Mirrored
Description
Protocol
Source Port
Destination
No
ANY
ANY
ANY
OK
Cancel

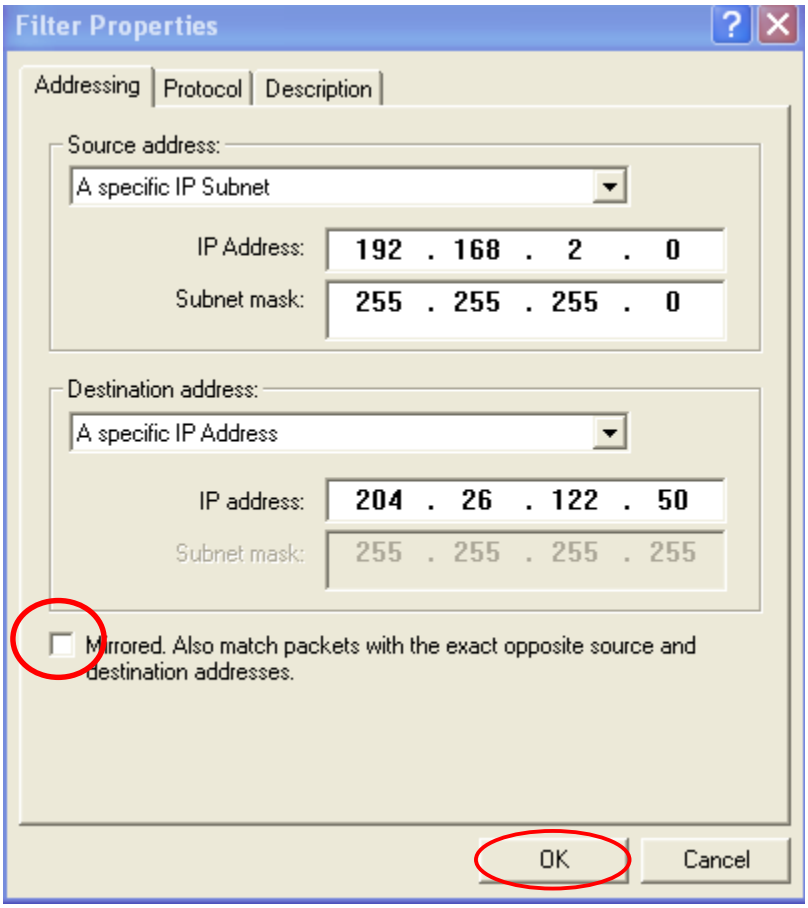
61. Choose “**RF550VPN to Win_XP**” and then click “**Edit**.”



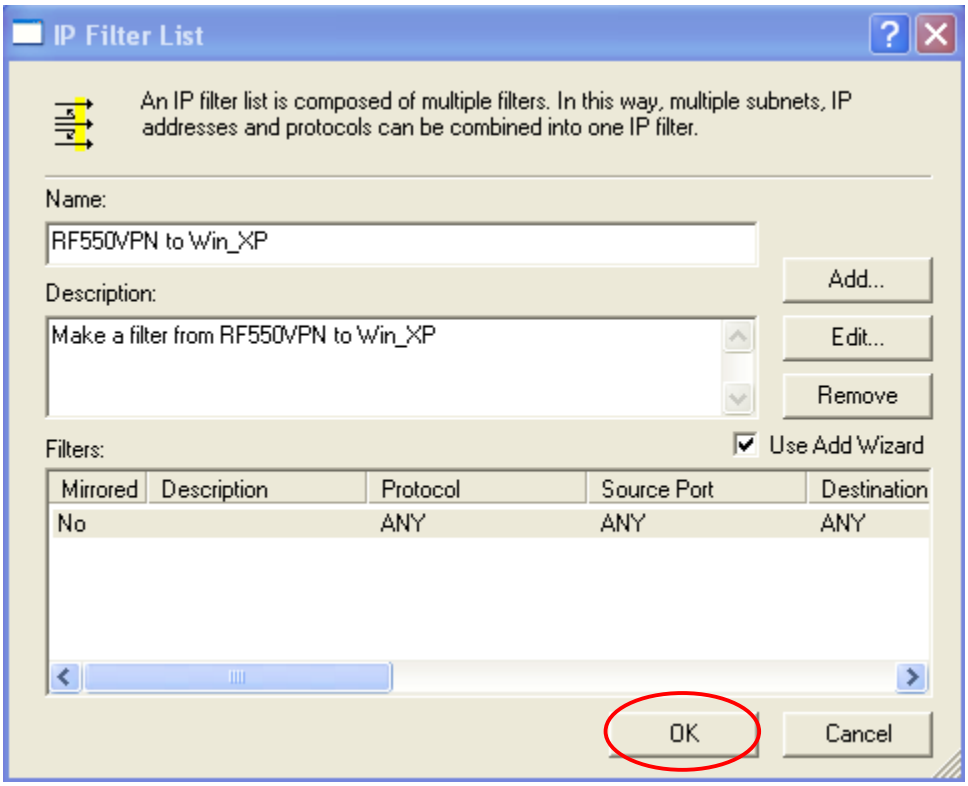
62. Click "**Edit**."



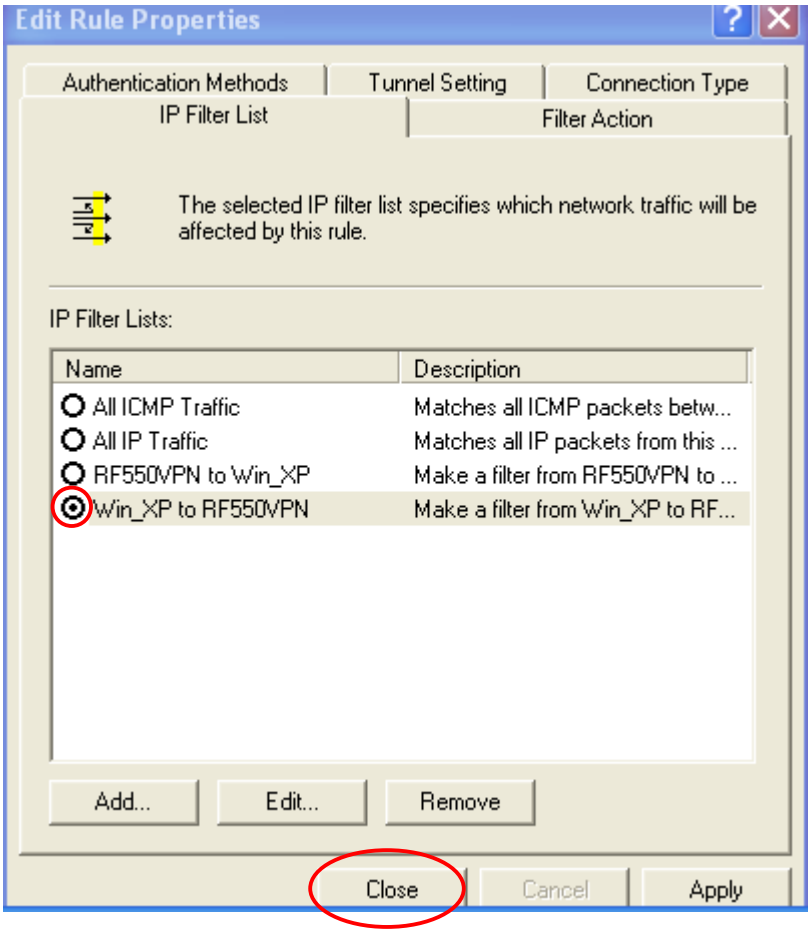
63. Uncheck "**Mirrored. Also match packets with exact opposite source and destination address**" and then click "**OK**."



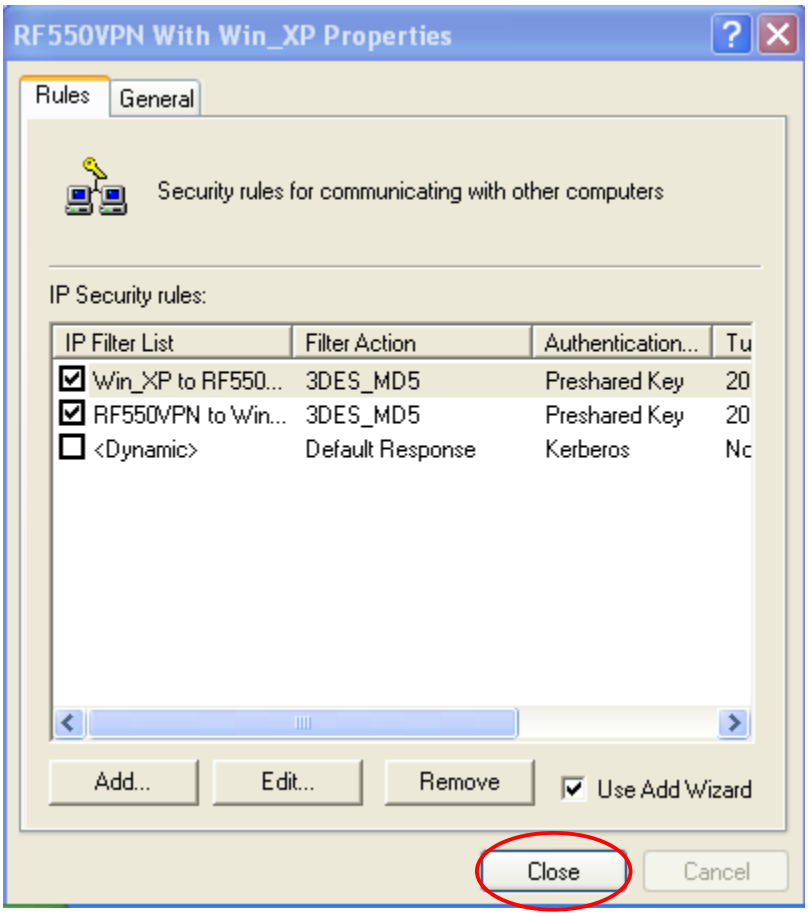
64. Click "**OK**."


IP Filter List
An IP filter list is composed of multiple filters. In this way, multiple subnets, IP addresses and protocols can be combined into one IP filter.
Name:
RF550VPN to Win_XP
Description:
Make a filter from RF550VPN to Win_XP
Add...
Edit...
Remove
Filters:
Use Add Wizard
Mirrored
Description
Protocol
Source Port
Destination
No
ANY
ANY
ANY
OK
Cancel

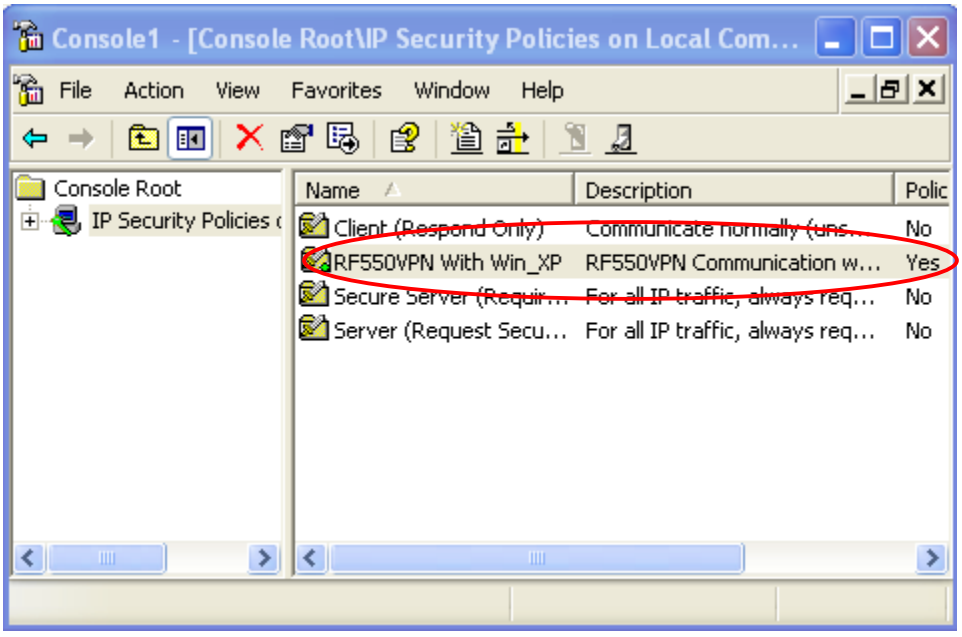
65. Highlight "**Win_XP to RF550VPN**" and make sure a dot is in the circle for this selection, and then click "**Close**."



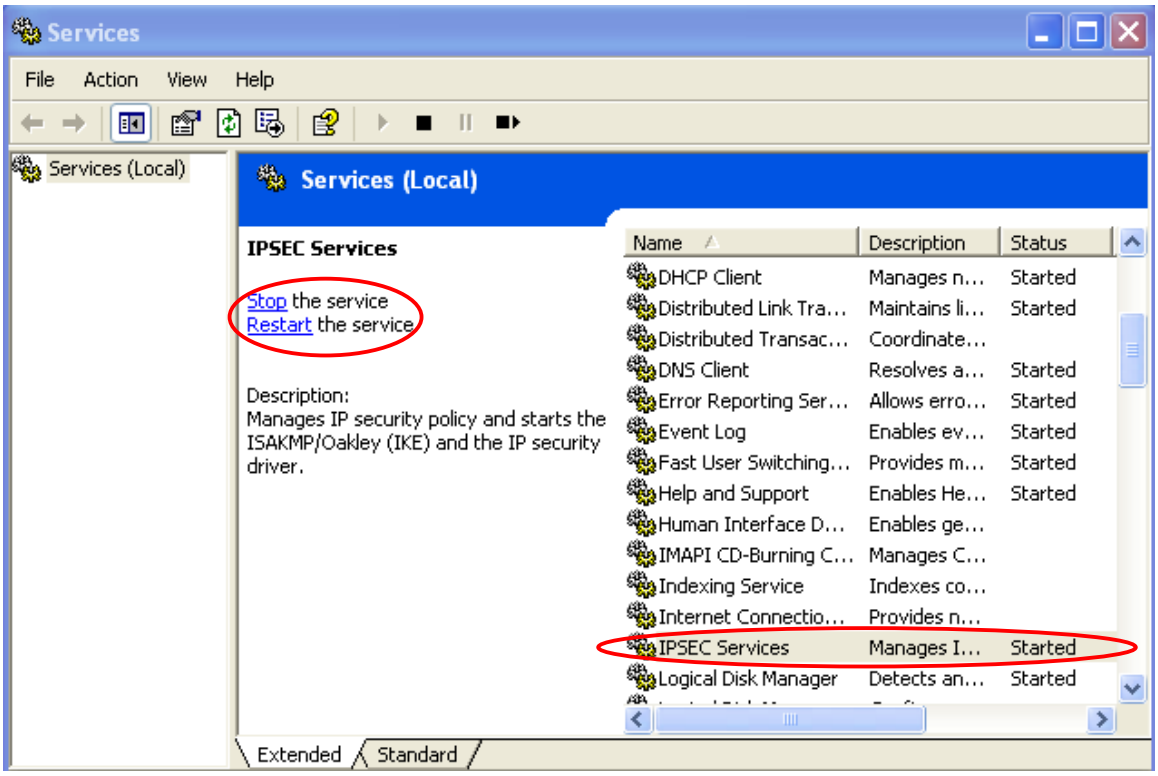
66. Click "**Close**."



67. Click right button on "**RF550VPN With Win_XP**" and click "**Assign**". The "**Policy Assigned** " column will change from "**No**" to "**Yes**" for this item.



68. Now you want to verify that IPSec Services have been started. To do this, left click on "**Start**" in the lower left corner of the screen; then click on "**Administrative Tools**"; then "**Services**", and then "**IPSEC Services**." Start "**IPSEC Services**."



69. Ping Remote private network on Dos Command Mode.