



<p><b>Title:</b> When DHCP Hotels/Offices have the same IP scheme as your company's internal</p> <p><b>Document Number:</b> VPN-3.0.1-001</p> <p><b>Version:</b> 0.1</p> <p><b>OS Ver. this Paper Applies to:</b> ScreenOS 2.6.0/2.6.1/3.0.0/3.0.1/3.1.0</p> <p><b>HW Platforms this Paper Applies to:</b> NS-5/5XP/25/50/100/204/208/500/1000</p> <p><b>Audience (Internal or External):</b> External</p>
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Introduction

This is a work around for when a hotel or business hands out IP's that are the same or overlapping with the ones back at the office. This will work as long as you do not rely on the internal office DNS server or WINS for obvious reasons.

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- A. How to check the IP the Hotel is handing out
- B. How to check the office IP schema that is set up.
- C. What to do if it is the same as your internal company
- D. Implement a workaround on the NetScreen.
- E. Why this is only a workaround and not a fix

A. How to check to see what the hotel is giving out for IP address.:

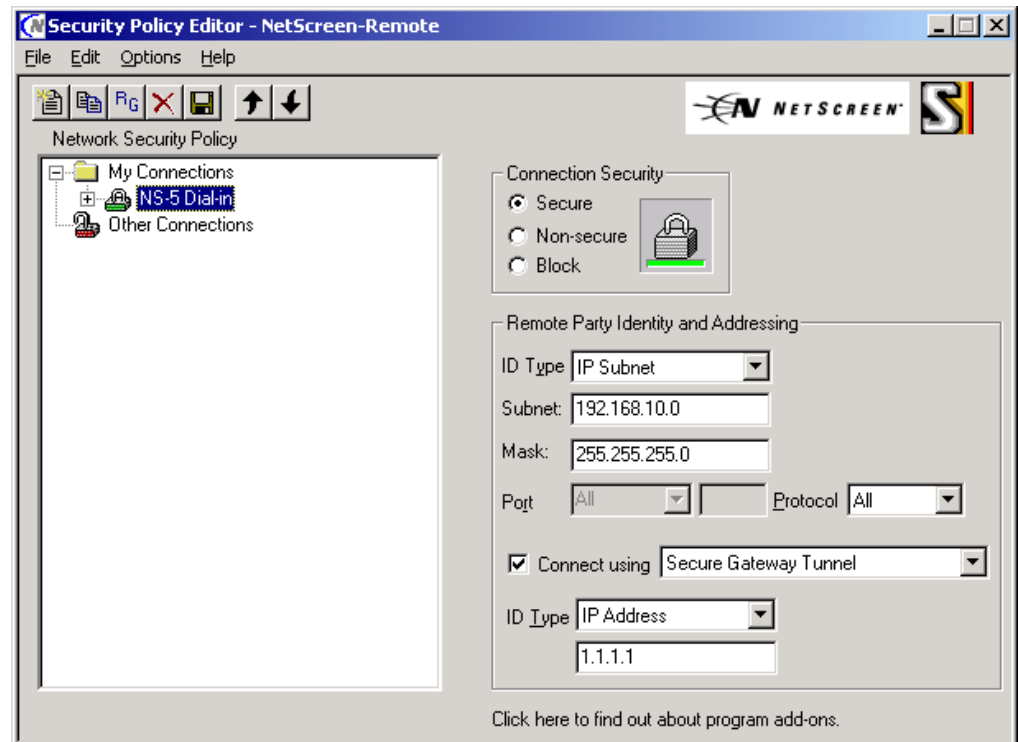
- 1. start up a command prompt , for example on a Windows 2000 machine you will go to Start → Run . Then type in the command:  
cmd in the text box area and hit return
- 2. This will start up a command window with the command prompt. Here type in the command:  
ipconfig
- 3. The output will look like this:  
Ethernet adapter Local Area Connection 1:

```
Connection-specific DNS Suffix . : netscreen-5
IP Address. . . . . : 192.168.10.0
Subnet Mask . . . . . : 255.255.255.0
Default Gateway . . . . . : 192.168.10.1
```

- 4. Notice the address  
IP Address. . . . . : 192.168.10.0  
this is the IP the Hotel is giving you.

B. Open the NS-Remote Security policy editor by right clicking on the N in the Icon tray or Start → Programs → NetScreen-Remote → Security Policy Editor

1. Make sure that you have Options → Secure → Specified Connections selected.
2. Click on the green lock. The screen should look like this



3. The area Remote Party Identity will tell you what the internal subnet you are trying to connect to is.
4. If the Subnet matches or overlaps with the one the Hotel is giving you then we will need to change the NetScreen

C. What to do if it is the same as your internal company.

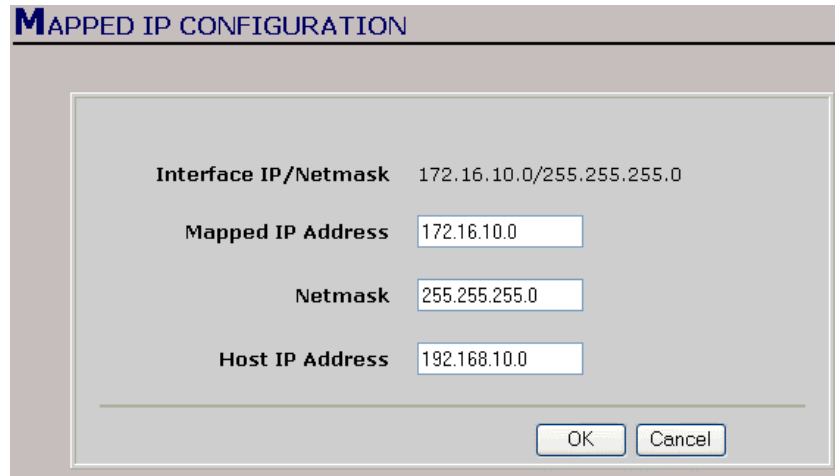
You will need to implement a work around that will NAT the traffic going to your true company address to another predetermined address using a tunnel interface. In order to use this workaround you will need to be familiar with the tunnel interface, which is an advanced topic and explaining it is beyond the scope of this paper. You can find more out about the tunnel interface in the Concepts and Example guide as well as a white paper on overlapping subnets.

D. Implementing a workaround on the NetScreen.

1. The first thing you will need to do is create a tunnel interface. Go to interface → tunnel → New Entry

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2. Enter a subnet that is not being used by your company, you will want to create this subnet with the same subnet mask as your internal companies addressing scheme. The reason being we are going to do a one for one mapping of each address.

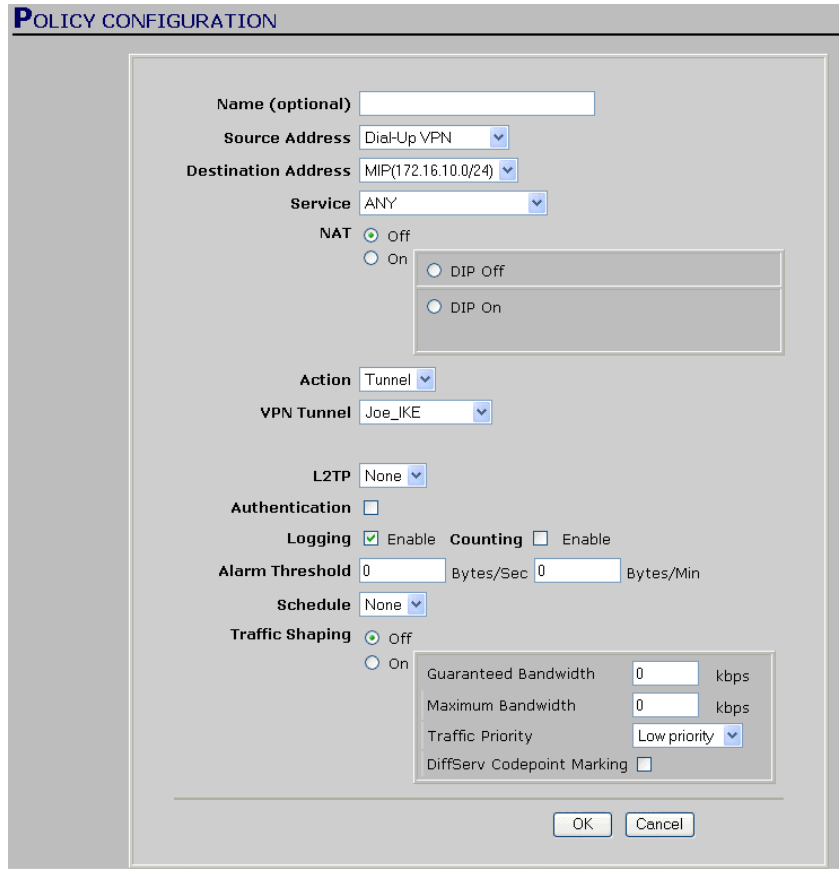


**MAPPED IP CONFIGURATION**

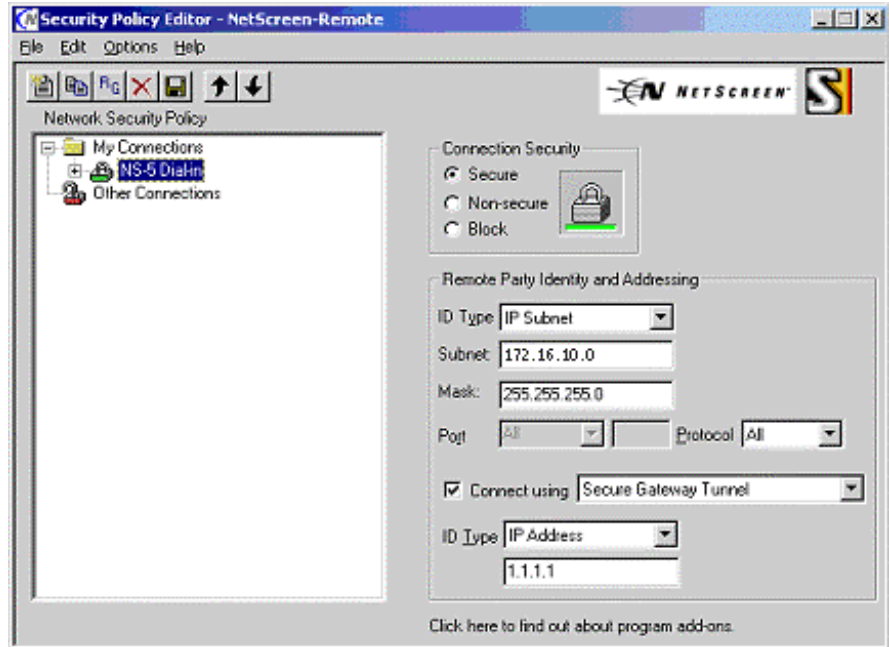
Interface IP/Netmask	172.16.10.0/255.255.255.0
Mapped IP Address	<input type="text" value="172.16.10.0"/>
Netmask	<input type="text" value="255.255.255.0"/>
Host IP Address	<input type="text" value="192.168.10.0"/>

OK Cancel

3. Next you will need to create a one to one MIP for the tunnel interface so select Mapped IP. Click on New Entry, and for the **Mapped IP Address** enter the IP of the beginning of the subnet chosen. Enter the subnet mask for you used in the tunnel interface, then enter the beginning **Host IP Address** of the subnet.



4. You will then need to create an incoming VPN tunnel policy that allows the user to use the new tunnel interface.



5. The last thing you need to do is modify NS-Remote to now go to the MIP rather than the true internal IP's so you would change it to look like this.

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E. Why this is only a workaround and not a fix

Being so many Windows functions rely on the internals of the packet (Net Bios). It will work best for TCP/IP functions like Telnet, FTP the mapping of drives will be difficult if not impossible. This will also impact looking at your Network Neighborhood because of the way NAT works with NetBios.