

How to setup the NetWatcher Virtual machine on a laptop with 1 network card connected to a Netgear ProSafe managed switch in promiscuous mode.

Note that with this configuration you are using the same Lan port on the virtual switch for outbound access to the NetWatcher cloud as well as doing deep packet inspection.

For this to work you should ensure that:

- You are not blocking UDP 443 outbound.
- You do not have any firewall software running on the laptop that would block the sensor.

Here is the typical test environment. 1 – the laptop running [VMware player](#) and the NetWatcher sensor. 2 – an inexpensive managed switch ([Netgear ProSAFE](#) is great). 3 – an internet connection and possibly other computers attached to the switch.



Step 1: Download the Virtual Sensor and install it on the laptop

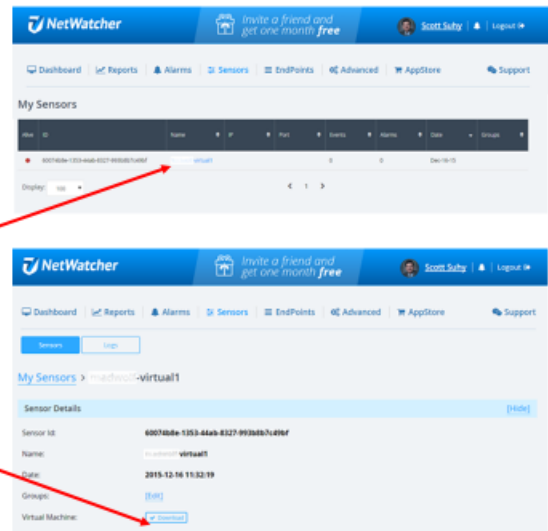
Download NetWatcher Sensor VM

How to login to the portal:

- You should have received an email to access the NetWatcher.com portal earlier. If you can't find it, log in to <https://portal.netwatcher.com/login> with your email address and reset your password.

How to download the Virtual Machine/Sensor:

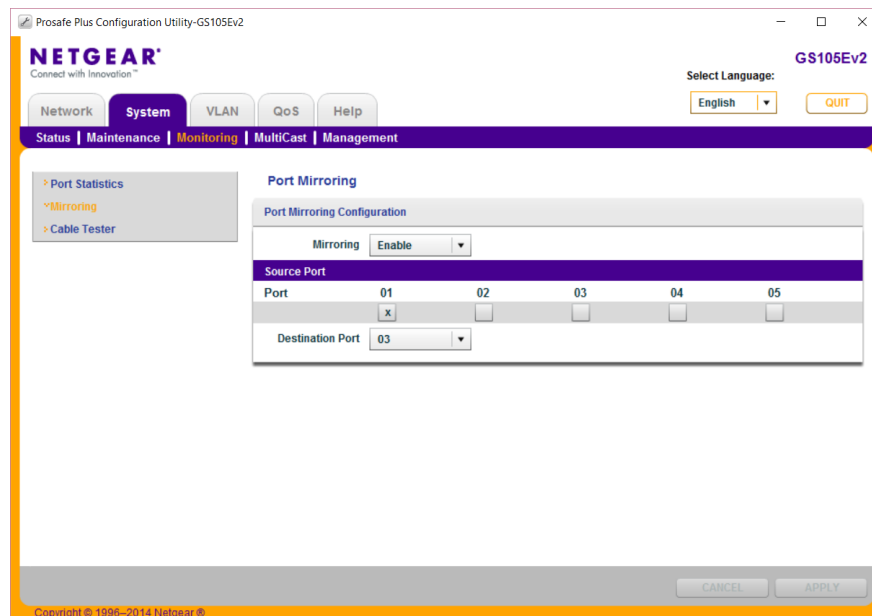
- Once you log in to your account, navigate to <https://portal.netwatcher.com/sensor/sensors>, click on your sensor, and press download. It will take a while to download as it's a large file. We use <http://www.7-zip.org> for compression and there is no password. There are two parts, extract the first one and it will continue into the second one.
- Unzip, then untar downloaded .xz file.



Step 2: Setup a Mirror port on the switch.

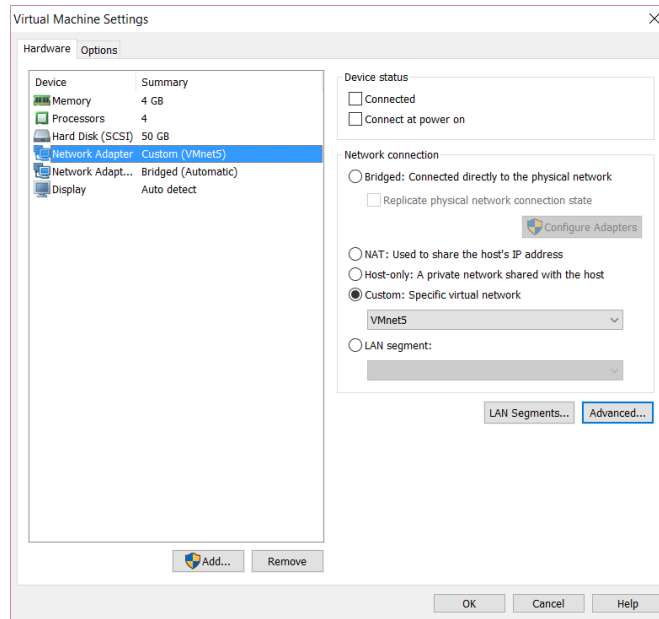
In this example configuration in the figure below you setup port mirroring under "System | Monitoring"

- Port 1 – connection to the internet.
- Port 3 - The laptop running the NetWatcher sensor. Must be able to get an IP address via DHCP.
- Port 4 – another computer generating traffic on the switch (red cable above)

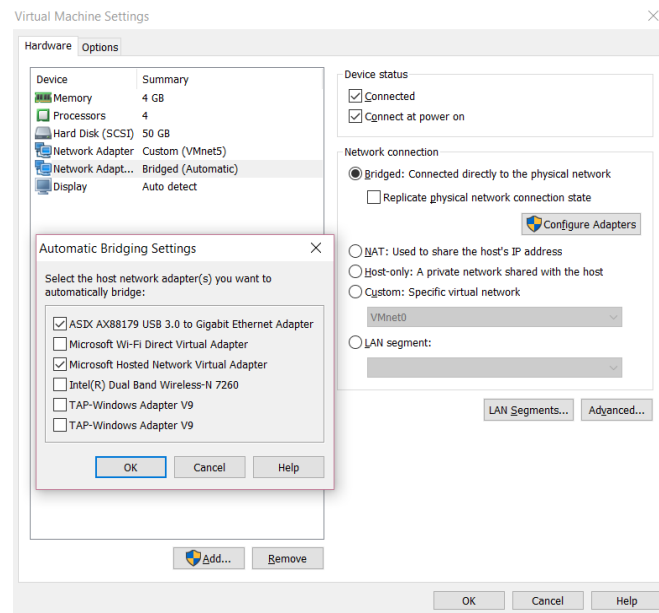


**We are mirroring all traffic from port 1 (internet) to port 3 (sensor)

Step 3 – Turn off one of the network adapters (VMnet5)

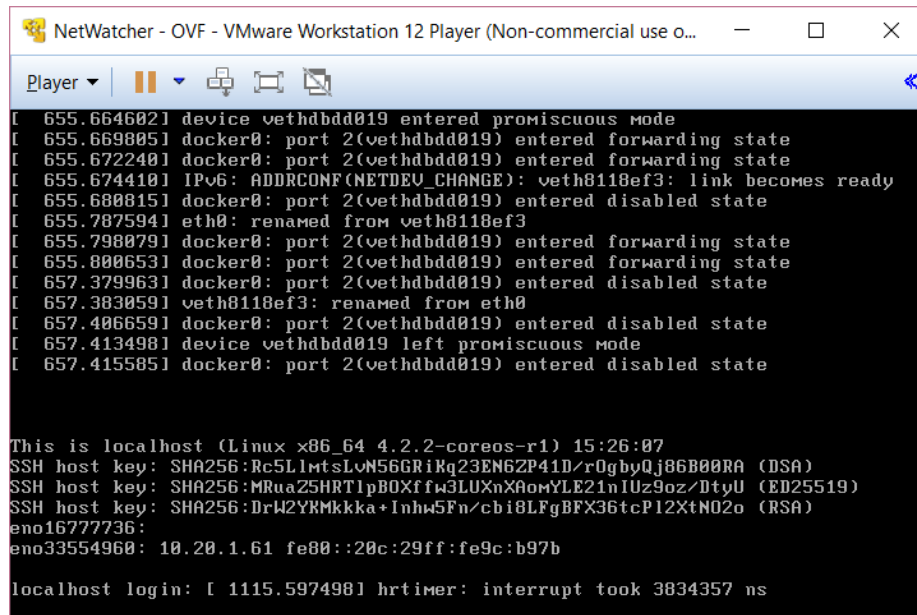


Step 4 – Put the second lan port in Bridged mode and choose Advanced to choose the adapters you want bridged.



Step 5 – Verify you have an IP address

Step into the VM and press enter. The VM will show the sensor's IP address as seen in the figure below.



```
NetWatcher - OVF - VMware Workstation 12 Player (Non-commercial use o...
Player
[ 655.664602] device vethdbdd019 entered promiscuous mode
[ 655.669805] docker0: port 2(vethdbdd019) entered forwarding state
[ 655.672240] docker0: port 2(vethdbdd019) entered forwarding state
[ 655.674410] IPv6: ADDRCONF(NETDEV_CHANGE): veth8118ef3: link becomes ready
[ 655.680815] docker0: port 2(vethdbdd019) entered disabled state
[ 655.787594] eth0: renamed from veth8118ef3
[ 655.798879] docker0: port 2(vethdbdd019) entered forwarding state
[ 655.800653] docker0: port 2(vethdbdd019) entered forwarding state
[ 657.379963] docker0: port 2(vethdbdd019) entered disabled state
[ 657.383059] veth8118ef3: renamed from eth0
[ 657.406659] docker0: port 2(vethdbdd019) entered disabled state
[ 657.413498] device vethdbdd019 left promiscuous mode
[ 657.415585] docker0: port 2(vethdbdd019) entered disabled state

This is localhost (Linux x86_64 4.2.2-coreos-r1) 15:26:07
SSH host key: SHA256:Rc5LlmtsLwN56GRikq23EN6ZP41D/r0gbyQj86B00RA (DSA)
SSH host key: SHA256:MRua25HRTlpB0Xffw3LUXnXAomYLE21nIUz9oz/DtyU (ED25519)
SSH host key: SHA256:DrW2YRMkkka+Inhw5Fn/cbi8LFgBFX36tcP12XtN02o (RSA)
eno16777736:
eno33554960: 10.20.1.61 fe80::20c:29ff:fe9c:b97b

localhost login: [ 1115.597498] hrtimer: interrupt took 3834357 ns
```