

Index

1. Connecting to your NVR
2. Configuring the network settings
3. Configuring storage devices

Product Support & Returns

Send us an e-mail with your invoice and serial number to support@optimanetworks.be, we will be happy to further assist you!

Require urgent technical support? Ring our support technicians at **+32 (0) 3 246 51 03**.

Ubuntu Default Credentials

Login	administrator
Password	NXOpt1ma

Webmin Default Credentials

Login	user
Password	nxwitness

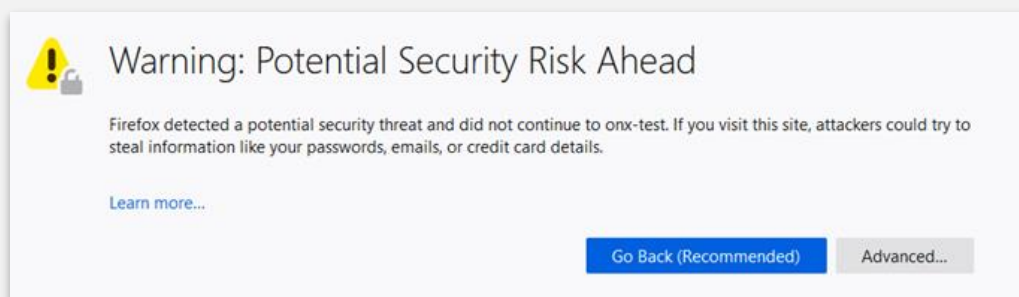
1. Connecting to your NVR

Connecting to your NVR is possible using multiple different methods. The easiest method is via the **Webmin** interface. Using the MAC-address, which can be easily found by checking the product-sticker on the back of the NVR, you can look up the IP-address of the unit.

Once you've done so, open your browser and navigate to the following URL. Replace the part of the URL marked in red by the IP-address of the NVR.

<https://X.X.X.X:10000>

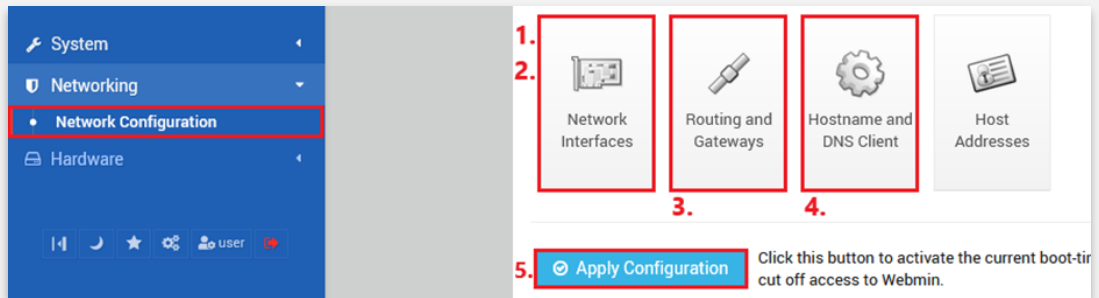
You'll likely get a security warning like the one depicted below, ignore this warning and continue regardless.



You will then be redirected to the Webmin login-portal. Use the default credentials mentioned above to log in.

2. Configuring the network settings

Once logged into Webmin, go to the sidebar and navigate to **Network** and then **Network Configuration**. Refer to the image below, where each required component is marked with a number corresponding to the steps below.



1. Keeping the DHCP-assigned IP-address and adding a static IP-address

Go to **Network Interfaces**, which will bring you to a page with a list of all the network interfaces on the NVR. Click the name of the interface you wish to edit and then select **Add virtual interface** at the bottom of the page.

Now configure the virtual interface as desired and confirm by pressing the **Create** button.

2. Replacing the DHCP-assigned IP-address by a static IP-address

Go to **Network Interfaces**, which will bring you to a page with a list of all the network interfaces on the NVR. Click the name of the interface you wish to edit and change the IPv4 address from **From DHCP** to **Static configuration** and set the values as desired.

3. Manually configure the gateway-address

If required, you can change the gateway address in this section.

Go to **Routing and Gateways**, then simply enter the gateway address in the appropriate field and make sure to select the correct network interface on which to configure this setting. Press **Save** once you're done.

4. Manually configure the DNS-servers

If required, you can change the nameservers for the NVR in this section.

Go to **Hostname and DNS Client**, then enter the nameservers in the appropriate fields. Press **Save** once you're done.

5. Apply Configuration

Once you've made sure everything is configured correctly, you can press **Apply Configuration** to actualize all of the changes you've made.

3 Configuring Storage Devices

There are multiple different ways in which you can configure a storage device. Depending on your needs, you may opt for a **RAID-** or **LVM-**based solution. Before continuing with the configuration of the NVR, please decide on which solution suits your needs best and follow the appropriate steps.

Creating a logical volume

1. Partitioning the storage devices

Go to **Hardware** and then to **Partitions on Local Disks**. Click on the name of the storage device you want to partition, then click on **Create Partition Table**. Now select **GPT** in the dropdown menu and confirm your selection by clicking on **Wipe and Re-Label**. On the next screen, click on **Add primary partition** and then click on **Create**. Repeat this step for every storage device you want to use.

2. Creating a volume group

Go to **Hardware** and then **Logical Volume Management**. Then click on **Add a new volume group**. Enter the desired name (*e.g. StorageVG*) for the volume group in the appropriate field and select any of the partitioned storage devices.

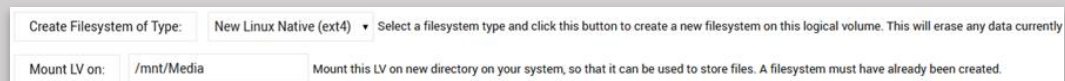
3. Adding storage devices to the volume group

Under **Logical Volume Management**, go to the **Physical Volumes** tab and click on **Add a physical device to StorageVG**. Select the desired storage device and click on **Add to volume group**. Repeat this step for every storage device you want to use.

4. Making the volume available as a storage device

Go to **Logical Volume Management** and then to the **Logical Volumes** tab. Click on **Create a logical volume in StorageVG**, then fill out the desired name for the volume (*e.g. StorageLV*) and click on **Create**.

Once created, click on **Return to Logical Volume** and you should arrive in the logical volume that you've just created. Here, select **New Linux Native (ext4)** in the dropdown



Create Filesystem of Type: Select a filesystem type and click this button to create a new filesystem on this logical volume. This will erase any data currently

Mount LV on: Mount this LV on new directory on your system, so that it can be used to store files. A filesystem must have already been created.

menu and click on **Create Filesystem of Type**.

Now simply click on **Create** and, once it appears, click on **Return to Logical Volume**. Once arrived back in the logical volume, fill in **/mnt/Media** in the appropriate field and click on **Mount LV on** to continue.

Now find the field **Action on error** and select **Continue** in the dropdown menu, then click on **Create** to finalize. Your logical volume will now be mounted on startup and is immediately available for use by Nx Witness.

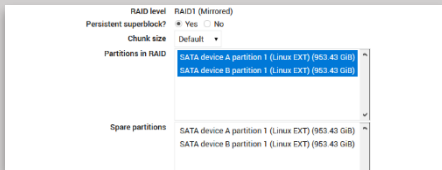
Creating a RAID device

1. Partitioning the storage devices

Refer to the identical step outlined in the previous page.

2. Creating a RAID device

Go to **Hardware** and then **Linux RAID**. Select the desired **RAID** type in the dropdown menu and then click on **Create RAID device of level**. On the next page, select all of the storage devices you wish to add into the array. You can hold down **CTRL** and click on each storage device in order to select more than one.



Note when working with used hard drives:

Select **Yes** under **Force initialization of RAID**. If you do not do this and a previous filesystem is detected on the hard drive(s), the creation process may fail.

Click on **Create** and once redirected to the next page, click on the name of the new RAID device you have just created (e.g. *md0*).

Please note:

It's possible that the NVR is still creating the RAID device, which will allow you to continue on with the following steps but it could take multiple hours before the RAID device is fully functional.

WARNING

Never disconnect the power cord or storage devices while this is still in progress, nor should you power off the NVR in any other way.

You may check whether or not the RAID device is completely functional by navigating to **Linux RAID** in Webmin. If the RAID device shows the status **Clear** in the overview, you can safely power down the NVR.

3. Configuring the RAID device

Click on the name of the **RAID device** that was just created and then select **New Linux Native (ext4)** in the relevant dropdown menu, then click on **Create filesystem of type**. Click **Create** to continue and once available, click on **Return to RAID devices**.

Click on the name of the **RAID device** again and fill in **/mnt/Media** in the appropriate field, then click on **Mount RAID on** to confirm. On the next page, find the field **Action on error** and select **Continue** in the dropdown menu, then click on **Create** to finalize.

The RAID device will now be mounted on startup and is immediately available as a storage option in Nx Witness.