Qualys Network Passive Sensor v1.x

Release Notes

Version 1.3.2
September 16, 2021

This release contains the following new features and improvements.

Auto-Scaling of Virtual Passive Sensor

Support for Multiple Sniffing Interfaces on Virtual Passive Sensor

Improvements in Hyper-V Deployments

Option to Filter Sensors by Sensor Type

Auto-Scaling of Virtual Passive Sensor

With this release, the Virtual Network Passive Sensor (PS) can automatically scale up or down to provide higher or lower throughput based on the resources allocated. The recommended resource allocation for a Virtual Network Passive Sensor (PS) to process 1 Gbps throughput is 8 cores with a dedicated 12Ghz CPU and 16 GB RAM. Before this release, Virtual Network Passive Sensor (PS) supported a maximum of 1 Gbps throughput.

The virtual appliance checks the resource allocated to it and computes its throughput capabilities at startup. So, the user must power on the virtual appliance after allocating additional dedicated resources such as extra CPU cores and RAM to the VM. The computed throughput is visible on the sensor details page in the Network Passive Sensor Module on Qualys Cloud Platform.

The appliance's throughput depends on the CPU GHz, type of CPU, and type of RAM (DDR3/4) allocated. For example, allocating an additional 2 cores + 4GB DDR3 RAM will give lesser throughput than 2 cores + 4GB DDR4 RAM. Please refer to the 'Appendix - Virtual Network Passive Sensor (PS) Appliance Packet Throughput Based on Resources' section of the Qualys Network Passive Sensor Virtual Appliance User Guide for guidance on additional resource allocation.

Also, note that even after VM resources are beefed up, it is possible that some traffic compositions may result in less than expected throughput. For example, this can happen if the traffic that PS is sniffing has a few long-lived voluminous flows.

Support for Multiple Sniffing Interfaces on Virtual Passive Sensor

Network Passive Sensor (PS) supports an aggregated internal sniffing interface. The user now has the flexibility to add more network adapters to the VM. The PS appliance automatically senses the adapters at boot-up time and adds them as members of the aggregated sniffing interface. So user has to power off the VM, add new interfaces or remove already added sniffing interfaces, and then power on the VM again. Note that the network adapters should have vmxnet3 as a driver on the ESXi platform for better performance. Please refer to the 'Appendix - Adding/Removing Sniffing Interfaces from Virtual Appliance' section of the Qualys Network Passive Sensor Virtual Appliance User Guide for the guidelines on how many resources to add.

Improvements in Hyper-V Deployments

The older virtual appliance (version 1.3.1 or earlier) had the following limitations:
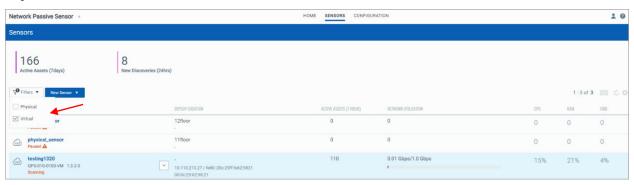
- Hyper-V deployments were done in a pass-through mode where the physical interface on the host machine had to be directly connected to the sniffing interface of the virtual appliance.

- Only a few selected Intel NIC cards were supported.

- Deployment was possible only on Microsoft Hyper-V 2016 or later that support pass-through mode.

This release addresses all the above limitations. Now user can deploy the virtual appliance on Hyper-V and connect it to the mirror/upstream port of a V-switch, which in turn can have one or more physical interfaces as its members. User can deploy the virtual appliance on Microsoft Hyper-V on Windows 2012R2 or later. Refer to the 'Deployment on Microsoft Hyper-V' section of the Qualys Network Passive Sensor Virtual Appliance User Guide for the Hyper-V deployment steps.

Option to Filter Sensors by Sensor Type

The **Sensor** page now contains an option to filter the sensor listing by the type of appliance – Physical or Virtual.