# NUSOFT

Tech Overview : Keys to Effective Troubleshooting

The great variety of security threats brings damage to organization every minute and every moment. Thus, network security device has become a necessity from small businesses to large enterprises. However, for organizations that purchase the costly security devices to protect their network from the security breaches, the service is as important as the quality of the device. Those organizations may decide whether to buy the device from the same seller depends on the service.

When the customers inform the sellers of the device fault, what do the sellers do to help them resolve the problem effectively? To decrease time consumption and increase customer satisfaction, it is important to identify the cause of problem accurately and then perform the corrective steps.

First, the sellers may help the customers to diagnose the cause of the problems step by step. Is the power indicator illuminated? Or, is the device damaged? By the diagnosis steps, the customers may exactly track down the problems and know if they can resolve the problem by themselves or they should send the device back for repairing.
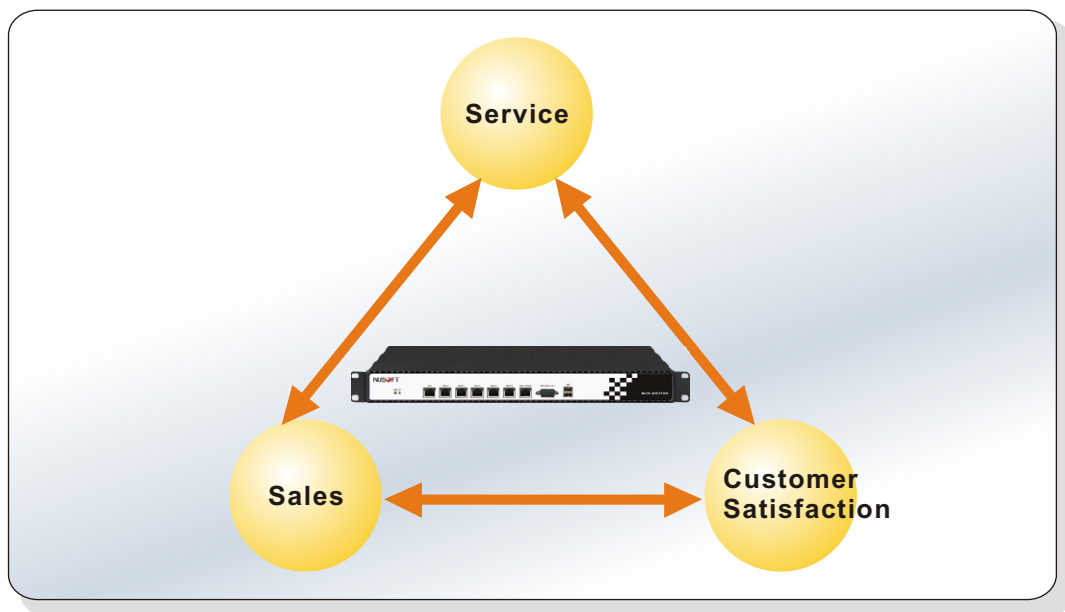
Following is the troubleshooting flowchart for UTM / MS and MHG / MH Series. Users may use it to diagnose the problems.

Fault reported

Are the LED indicators lit as per normal? — No / Yes

No LED indicators lit → Check if the power socket is working. — Yes → Is the power supply unit (PSU) damaged? — Dead → Type of PSU — Power adaptor → Send it back to Nusoft

Type of PSU — Inbuilt power supply → Send the complete device to Nusoft

Is the power supply unit (PSU) damaged? — Unsure → Inbuilt power supply

Check if the power socket is working. — No → Make sure the electricity is running

H.D. LED indicator keeps flashing → It might be formatting the hard disk. Please wait for 20 mins. → Can you access the Internet after the indicator stops flashing? — No / Yes → Problem solved

LAN LED indicator keeps flashing → It could be caused by a closed-loop system or a DoS attack. Remove its connection and connect to a PC instead. → Is the Internet accessible via the PC (crossover cable required depending upon the model)? — No / Yes → Exclude the two possibilities and restore the connection

Port LED indicator isn't lit → Do a cross-check on the cable using another port → Is the other port LED indicator light on? — No → Connect the cable to another port or check whether the connected device functions properly

Is the other port LED indicator light on? — Yes → Is there any substance inside the jack? — Yes → Remove it and connect the cable back

Is there any substance inside the jack? — No → Send the complete device to Nusoft

Status LED indicator isn't lit → Send the complete device to Nusoft

Status LED indicator keeps flashing → It's booting up. (The time it takes could vary with the system configurations.)

Can you ping a remote host's IP address? — Yes / No

Does the hostname resolve into an IP address using nslookup? — No → Check whether the configuration or device used to resolve the DNS works properly

Does the hostname resolve into an IP address using nslookup? — Yes

Is the device's management interface accessible (Permitted IP required)? — Yes → Are there any misconfigured policies under Policy? — Yes → Are there any logs under IDP or Anomaly Flow IP that indicate an intrusion or anomaly flow? — No → Contact Nusoft and provide them with access to the device's management interface

Are there any logs under IDP or Anomaly Flow IP that indicate an intrusion or anomaly flow? — Yes → Take actions to resolve the issue that is pinpointed.

Are there any misconfigured policies under Policy? — No → Correct the inappropriate network policies under Policy

Is the device's management interface accessible (Permitted IP required)? — No

Can you ping the device by its IP address (Permitted IP required)? — Yes → Is the device's management interface accessible? — Yes → Is the WAN connection disconnected? — Yes → Is the Internet alive or the referencing host for connection detection down?

Is the WAN connection disconnected? — No → Have any of the LAN MAC addresses on the ARP table been changed? — No → Is there a possibility of ARP spoofing?

Have any of the LAN MAC addresses on the ARP table been changed? — Yes → Take actions to exclude the two possibilities

Can you ping the device by its IP address (Permitted IP required)? — No

Is the device's management interface accessible? — No

See if the device's management interface can be accessed via a single connection with a PC (crossover cable required depending upon the model) — Yes / No

Could it be caused by a malfunctioned device or a loose cable connection? — No / Yes → Take actions to exclude the two possibilities

Have any of the MAC addresses on the static ARP table been modified? — Yes → Make sure all MAC addresses are matched to the corresponding PCs

Are there any logs under IDP or Anomaly Flow IP that indicate an intrusion or anomaly flow? — Yes → Take actions to resolve the issue that is pinpointed.

Are there any logs under IDP or Anomaly Flow IP that indicate an intrusion or anomaly flow? — No

Is there a console port available and accessible on the device? — Yes → Connect an Internet-enabled PC to the console port → Contact Nusoft and prepare a PC that is connected to the device for remote access by Nusoft.

Is there a console port available and accessible on the device? — No → Send the complete device to Nusoft

No console port available → Press the Reset button to restore the factory default settings → Is the management interface accessible via the IP 192.168.1.1? — No → System configuration corrupted

Is the management interface accessible via the IP 192.168.1.1? — Yes