

Network Box USA Firewall & Intrusion Prevention Systems

Network Box USA firewall is a hybrid design with stateful inspection, packet filtering, NAT, and advanced routing capabilities. It is tightly integrated with two intrusion prevention systems (IPSs) that work together to block network-level attacks.

Traffic Flow through Network Box USA Solution:



If either IPS finds something malicious during a deep packet inspection, it not only drops the connection, but it also communicates with the firewall, which will then block any packet coming from that same connection.





Advantages:

Saves on CPU and bandwidth. The firewall is a faster technology that is not as CPU intensive. Since the IPSs communicate with the firewall, any packet coming from an already identified malicious connection is going to be blocked. It doesn't have to go through a deep packet inspection that compares it against a string of signatures.

Increases security efficiency. This configuration reduces the risk of missing a packet, as it simply doesn't make it through the firewall. When you buy an IPS that is separate from the firewall, you may end up with over 6,000 signatures. Those signatures are no longer necessary in our case because the same functions can be done in the firewall.

Saves on IT security costs. Since the IPSs are inline with the firewall, you don't need an IPS for every interface because all interfaces that terminate on the Network Box solution are automatically scanned. With a separate IPS, you are only monitoring one interface. If you have a DMZ and something moves between the LAN and DMZ, you'll never know because the sensor never sees it. In our case, you would see it because it goes through the solution.



This also applies if a remote computer logs in through a VPN. In a traditional configuration, you'd have to purchase an IPS for every interface plus an additional one for every VPN; the IPS is typically sitting outside the network, so it won't see the VPN. It will just trust it because it's encrypted and it can't scan it. The only thing you can probably do is some anti-spoofing.

With Network Box, the IPS is running on every port, and all connections going through the solution – VPN to LAN, or DMZ to IPSec – are scanned.

Fun Fact: Interestingly, the industry is calling this sort of deep packet inspection a "next-generation firewall", but Network Box has been doing this for a long time.