The Next-Generation Firewall Buyer's Guide

The next-generation firewalls (NGFW) of today are agile, powerful, and capable of protecting corporate networks from the most advanced, evasive and debilitating cyberthreats.

In response to new network challenges posed by mass flexible working, increasing numbers of businesses are considering upgrading to a NGFW. Here, we break down the features to look for in a solution – including what you should demand as standard.

Essential requirements

1 Virtual Private Network (VPN)

VPNs provide robust, secure access to corporate networks and resources and are essential to distributed networks and work from home operations.

Any NGFW should provide a comprehensive VPN solution with site-to-site and remote-access encryption, that is managed within the firewall dashboard. It should include advanced features such as route-based VPN and easy VPN with dynamic routing and is also a prerequisite for SD-WAN architecture.

2 Intrusion Prevention System

Intrusion Detection and (or) Prevention System (IDS/IPS) within a NGFW provides an additional layer of needed security by stopping attacks that exploit internal vulnerabilities.

Detection functions by using signatures for known exploits and is based on anomaly detection, and the IPS within the NGFW should have two deployment options – detection mode (alert only) and prevention mode (alert and block).

3 Application Control

NGFWs should have additional application control, allowing administrators to define firewall policies based on applications (e.g., Facebook, YouTube, Salesforce) and micro-applications (e.g., chat and IMs).

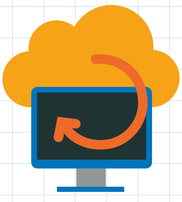
Application control gives granular control over network traffic based on user identity and email addresses while providing application-layer access control to regulate web browsing, file transfer, email exchange and email attachments.

4 Web Control (URL Filtering)

Within a NGFW, web control compares requested websites against a massive database containing millions of rated URLs, IP addresses and domains.

It enables administrators to create and apply policies that allow or deny access to websites based on individual or group identity, or by time of day, using pre-defined categories. It should also dynamically cache website ratings locally onto the NGFW for instantaneous response times.

Advanced requirements

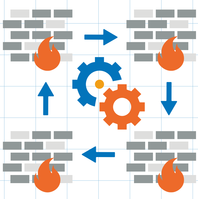


5 Network and Cloud Sandboxing

NGFWs should ideally feature malware-analysis technologies and can detect evasive advanced threats. Sandboxing technology scans traffic and extracts suspicious code and analyses a broad range of file types and sizes.

This enables enterprises to stop zero-day threats that can slip through other security controls within a NGFW. Businesses need to consider both on-premises and cloud-delivered sandboxing based on their individual performance and privacy needs and seek out a solution that examines every byte before delivering a final verdict to allow or block.

6 Multi-instance firewall



A next-generation approach to legacy multi-tenancy that supports multiple firewalls with separate configuration on a single appliance. With this approach, each firewall instance is isolated with dedicated compute resources to avoid resource starvation.

Businesses can thereby run multiple independent firewall instances, software versions and configurations on the same hardware without managing different physical appliances.

7 Dedicated Threat Intelligence

Most of the security controls in an NGFW should be augmented by threat intelligence to keep them updated on the latest threats and signatures.

So, look for providers that have a team of cybersecurity professionals, advanced machine learning algorithms and security sensors that are spread around the globe, which significantly bolsters a firewall's ability to automatically block threats in nanoseconds.

Do you need help choosing the right next-generation firewall to secure your network? Speak to a Starcom expert about building a bespoke network security package on **0844 579 0800**

SONICWALL

Sponsored by SonicWall

starcom

A Node4 Company