

February 2024 Issue #135 network-box.com

# Networ

February 2024 **Highlights** 

- ItBR 202402 Ransomware Delivery Protocol (RDP) and others
- Network Box Hong Kong Cyberport Cybersecurity Panel Discussion
- Global Security Headlines
  - □ Cisco
  - TeamViewer
  - □ Ivanti
  - Cloudflare

24x7x365 **Protection** 

**Next Generation** Managed Security

**Unified Threat Management Plus** (UTM+)

### **Award-Winning** Solutions and Services















Malware, Anti-Spam, SD-WAN, Web Proxy, Content Filtering, Data Loss Prevention (DLP), Company 1000, ISO 9001 / 20000 / 27001 / 31000 Certified Management, IPv6 Ready Core Phase-2 Certified, In-the-Cloud of Service, Web Application Firewall, IPv4-IPv6 / IPv6-IPv4 Bridging, Multiple Internet Connections, High Availar, Quality of Service Control, Traffic Policing, Threshold Limiting, Hardware Fault Tolerance, clustering possible for Control of Service Control, Iraffic Policing, Threshold Limiting, Hardware Fault Tolerance, clustering possible Secure Control of Service Control of sion Detection and Prevention (IDP), Virtual Private Networking (VPN), Real-Time updates with PUSH Technology, Secure 24 x 7 x 365 Monitive Adobe PDF Format Reporting, Mobile Protection, Anti-Distributed District Accept usion Detection

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sive Adobe PDF Format Reporting, Mobile Protection

Internet Acceleration, Secure VoIP (Voice over Internet Protocol) acceleration, Secure VoIP (Voice over Internet Protocol) acceleration, Secure Socket Layer), Virtual Private Networking, Mail Portal Syst

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strain, Selvices, Zero-Trust End-Point Services, Zero-Trust End-Point e and white / black listing, HTML-5 Dashboard, Secure Socket Layer Security Incident and Event Management, Mobile SIEM+, Cloud al-Time Monitoring, SSL (Secure Socket Lay L) Proxy, Application Identification, Entity main and IP Reputation Service, Cloud SS



# Cybersecurity for ALL

Today, every company is using the Internet to conduct their business. However, too many fail to realize that when they connect to the Internet, the world is linked back to them.

#### Merely having a Firewall is not enough in today's heightened cyber threat landscape.

Hackers, viruses, worms, ransomware, and phishing campaign, are just a few examples of what makes the Internet so dangerous. Because of this, relying on a high-quality managed cybersecurity services provider, like Network Box, can make all the difference.

#### With Network Box, your cybersecurity is assured.

Founded over two decades ago, Network Box is a leading global Managed Security Service Provider (MSSP), offering multi-award-winning cybersecurity services and technologies. A worldwide network of Security Operations Centres (SOCs) operating right across the globe, helps manage and protect your networks all year round.

At Network Box, we believe in providing our clients with the best security solution available and offer fully comprehensive protection for companies of all types and sizes. Indeed, many of the world's best-known companies, banks, hotels, and government departments have already been using Network Box to secure their computer networks.





Network Box continues to develop world-class security solutions that mitigate incoming threats from the Internet, such as intrusion attempts from hackers, zero-day threats, phishing emails/spam, DDoS attacks, and infections by trojans, viruses, and other malware. Business risk and outgoing threats are alleviated by blocking the leakage of valuable information and denying access to non-work related or infected websites and applications. Additional technologies including Entity Management, HTML-5 Dashboard, and KPI reporting, help with the management of your end-users and network.

These technologies have allowed Network Box to win more than 160 international industry, media, and governmental awards.









Network Box has won, in total, 13 Gold and 3 Grand awards published out of Silicon Valley.

# Industry Specialists





















Independent security researchers and analysts have recognized Network Box.

## Gartner



#### **Gartner Recognition**

Asia/Pacific Context: Magic Quadrant for Global MSSPs

#### Analysts:

Craig Lawson/Andrew Walls

#### Date:

02 July 2014

"Network Box's offering will appeal to companies that are looking for a managed UTM appliance with active support from professional security staff."

#### **The Forrester Wave**

Emerging Managed Security Service Providers FROST & SULLIVAN

Managed security service providers (MSSPs) offer managed security services (MSS) that help manage and monitor the security posture of their customers' IT infrastructures.

#### Frost & Sullivan

Market Report: Increasingly Sophisticated Threat Landscape Drives the Uptake of Managed Security Services in APAC (February 2021)



#### **ISO** Certified

Network Box HQ's Security Operations Centre has obtained 4 x ISO certifications, which are reviewed periodically to ensure Network Box's continued commitment to excellence.

- ISO 9001:2015
- ISO/IEC 20000-1:2018
- ISO/IEC 27001:2013
- ISO 31000:2018















Triple 100% Tolly Rating

Tolly Group, one of the world's most respected IT Testing Labs, certified Network Box with a triple 100% detection rating against their Extended WildList Malware database.









Network Box is listed as a Top 10 Contributing Partner in the Microsoft Active Protections Program (MAPP).

Network Box HQ and **HK Security Operations** Centers have both achieved compliance with the latest PCI DSS v3.2 standard.



#### PCI-DSS SSAE 16

Network Box USA has attained SSAE 16 SOC 2 attestation by the American Institute of Certified Public Accounts (AICPA).



Network Box is a Common Vulnerabilities and Exposure (CVE) output conformant partner on the MITRE website.



#### **KV-S@feNet**

**Network Box Germany** has been certified by KV-S@feNet, allowing for official integration with Germany's medical network.





# The Network Box Approach H look 24x7x

With Network Box, we do not just merely provide you with the hardware; we also fully manage your cybersecurity. As part of our services, once we install your device, our team of security engineers will remotely manage, monitor and protect your network from cyber threats 24 hours a day, seven days a week, 365 days a year. Thus, ensuring your network is continuously protected and allowing you to concentrate on running your business.

The uniqueness and what distinguishes Network Box from most other security vendors is our award-winning **Managed Security Services**. The Network Box Managed Security Services takes care of the never-ending, yet vital, management of your cybersecurity to protect you against the worst the Internet has to offer. And unlike other service providers offering managed services, we build our proprietary hardware and software and manage it ourselves. Nothing is outsourced, and no third parties are involved at any point, thus, ensuring a closed security loop.

## It looks like a product, but it's actually a 24x7x365 cybersecurity service

Cyber-attacks are ongoing, and staying protected against these emerging threats requires a dedicated team of security engineers to continuously monitor and protect your network, which most businesses do not have the time or resources to implement effectively. **Network Box's Managed Security Services include:** 

#### 24x7x365 Monitoring

Network Box analyses over 800 million statistical data packets daily, collaborates with more than 70 security partners worldwide, and operates over 250,000 virtual honeypots deployed in the cloud. In addition, every Network Box system is continuously monitored to ensure it is running smoothly.



#### 24x7x365 Management

Your security is remotely managed via a global network Network Box of Security Operations Centres (SOCs) spread across the world. The SOCs ensure that you are always protected against cyber threats.



#### 24x7x365 Protection

If a new cyber threat is detected, Network Box will automatically PUSH out and install security patches in real-time. Using patented PUSH technology, every Network Box system in the world is updated in an average time of less than 45 seconds.





## **Network Box UTM+**

Unified Threat Management (UTM) is a term that refers to an all-inclusive security solution that provides a comprehensive set of security functions and technologies within one single system.

However, not all UTMs are created equal. Most typical UTM offerings provide only the basics and do not give adequate protection from emerging cyber threats. Network Box, conversely, provides UTM+, which has more enhanced features provided by even the most advanced UTMs, and adds next-generation security technologies to provide fully comprehensive protection.

Cybersecurity issues arise because most businesses do not have the right solution in place. The Network Box UTM+ solution uses a multi-layered security approach to effectively safeguard your network from internal and external threats and additional features to manage your network.





Protection







**Additional** Features

#### **Incoming Threat Protection**

- Hybrid Firewall
- Intrusion Detection and Prevention (IDP)
- Anti-Malware
- Zero-Day Anti-Malware (Z-Scan)
- Anti-Spam
- Web Application Firewall (WAF)
- Anti-DDoS WAF

#### **Outgoing Threat Protection**

- Virtual Private Network (VPN)
- Web Content Filtering (S-Scan)
- Data Leakage Prevention (DLP)
- Infected LAN
- SSL Proxving
- Application Scanning and Control

#### **Additional Features**

- PUSH Updates
- SD-WAN
- HTML-5 Dashboard
- Customized Reports / Key Performance Indicators (KPIs)
- Entity Management
- IPv4 to IPv6 Bridging
- Cloud email and DNS Backup
- Dark Web Monitoring Service
- Security Incident and Event Management (NBSIEM+)

And more...



# S-M-E Hardware

A full range of Network Box models is available to suit your organizational needs. These models are designated **S** for Small, **M** for Medium, and **E** for Enterprise. Based on multi-core CPUs, all units are 64-bit and designed to offer exceptional performance and reliability. With high-grade chassis, the hardware units can withstand extreme shock, vibration, and temperature ranges.

Every unit has over 100 in-built sensors and is monitored 24x7x365 by the Network Box SOC to ensure the unit is running smoothly. Real-time backups of rules and settings of the hardware are also continuously performed. Furthermore, the units have no backdoors and do not collect your private data.

#### **Security Features**

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The security software, services, and protection afforded are identical for all models. The differences between models are purely hardware features and performance. All models provide the following security functions:

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Feature	Details	
Firewall	Proxy, Packet Filtering, Stateful Packet Inspection	
IDS/IDP	3 Engines / 16,000+ Signatures	
VPN Types	IPSEC, PPTP, SSL	
Anti-Spam	25 Engines / 30.8 million+ Signatures	
Anti-Malware	18 Engines / 24.8 million+ Signatures	
Content Filtering	15 Engines / 7.7 million+ Signatures	
Anti-DDoS	Millisecond response to brute force attacks	
IPv4 to IPv6 Bridging	Incoming/Outgoing Protocol Translation	
PUSH Updates	Delivered and installed automatically in real-time	



#### for Small Businesses

Secures small businesses or branch offices with enterprise-quality protection.



Cutting-edge, high-performance hardware for medium-sized organizations.



Designed to protect enterprises, allowing for the highest performance possible.









# PUSH Technology

Network Box's key technologies are all supported by patented PUSH Technology. Unlike standard security systems that usually pull updates from a server once a day, or at best once an hour, Network Box proactively PUSHes out and installs updates as soon as they become available.



Security updates are PUSHed out and installed in an average time of less than **45 seconds** 



True real-time security updates



Network Box Security Response is currently pushing out security updates, on average, once every 8 seconds

#### PU7 PUSH VS PULL **SH** Comparison Table

The table below highlights the key advantages of Network Box's PUSH technology compared to PULL updates found with most other security solutions.

Detail	PUSH	PULL
Update Notification	You DO NOT need to know that there is an update waiting	The system will connect to the server at a scheduled time to check for updates
Access Privileges	You DO NOT need to ensure that you have the rights to access the patch on the website	You may need to have the rights to access the patch on the website
Downloads	You DO NOT have to download it nor ensure the checksum is correct	You may have to download it and ensure the checksum is correct manually
Time	You DO NOT have to find time to install it	You may have to find the time to install it
Installation	You DO NOT have to repeat all these steps for each device	You may have to repeat all these steps for each device



# Virtual Patching

When a vulnerability is discovered or announced, a race starts between developing, testing, releasing, and installing the patches to fix it. Virtual Patching aims to quickly deploy early patches 'virtually' at your network gateway before formal patches can be released or installed, and before hackers can compromise your systems.



Targets network traffic attempting to exploit a known security vulnerability



Fast and effective protection before formal patches can be released and installed



Augmented with global threat intelligence from 70+ security partners

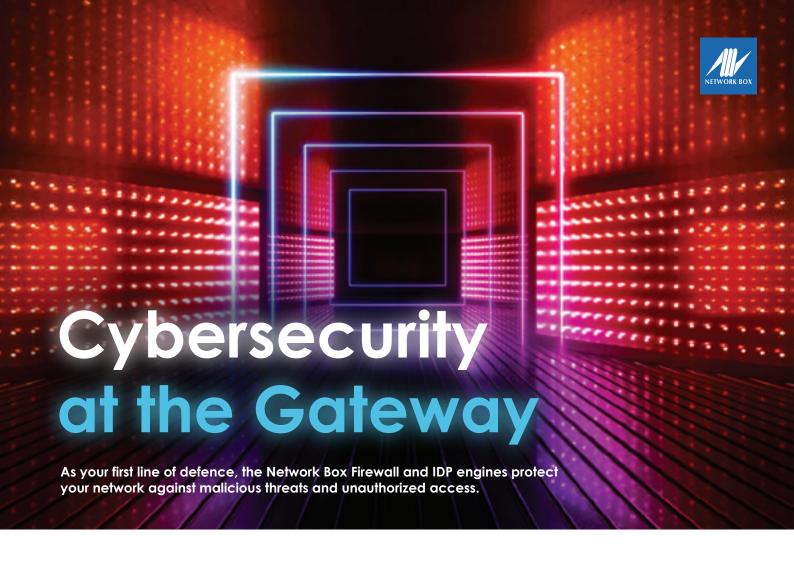
#### The Network Box Approach

Virtual patches target network traffic attempting to exploit a known vulnerability. They often start with signatures to detect the vulnerability or exploit behaviors, and then actively interrupt the traffic and block it before it affects the target system. Virtual patches are often a short-term solution, to buy time before formal patches can be deployed. They are a quick solution to a complex problem, as they can usually be deployed without a reboot or service interruption.



The Network Box approach is to have many layers of protection. From frontline IPS, firewall, IDS/IPS, application proxies, protocol scanners, and hardened services. Virtual Patching technology is implemented at each of these layers - choosing the best approach for each particular vulnerability and deploying protection with multiple technologies to protect against different attack vectors.

Additionally, Network Box maintains partnerships with numerous security organizations and works with these to gather and share threat intelligence.



# Hybrid Firewall

The Firewall, installed at the gateway, is your first line of defence against cyber attacks. Unlike most other firewalls, however, Network Box utilizes a Hybrid Firewall to effectively protect your servers and workstations from malicious probes and unauthorized access.



#### Packet Filtering Firewall:

Blocks or allows packets through the network depending on the source/destination IP, protocols, and ports. Suitable for basic protection with minimal overhead.



#### Stateful Packet Inspection Firewall:

Monitors active connections to determine which network packets to allow through to the network. Suitable for high performance and sophisticated rule sets.



#### **Proxy Firewall:**

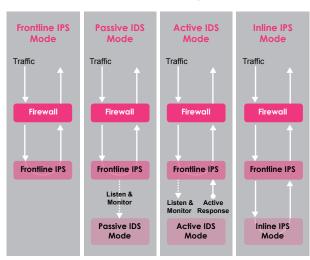
A set of secure proxies, integrated into the firewall, connection tracking and NAT systems, capable of high-level protection up to layer 7 Application Layer.

### **IDP**

## Intrusion Detection and Prevention

Tightly integrated with the Firewall, the Intrusion Detection and Prevention (IDP) system monitors and analyzes your network for signs of intrusion. If the system detects an intrusion attempt, it will log the incident. The system can be preconfigured to actively block the threat.

#### There are four IDP modes offered by Network Box:





# Multi-Layered Anti-Malware

The Network Box Anti-Malware system provides 18 anti-malware engines, running over 24 million signatures, to identify and prevent viruses, trojans, worms, and other malicious software from infecting your networked systems or networked smart devices.



18 Engines 24 million+ Malware Signatures



Triple 100% Tolly Group detection rating against their Extended Wildlist Malware database over HTTP, SMTP, and POP3 protocols



Anti-mobile malware protection

## **Z-Scan**

#### **Zero-Day Anti-Malware**

Z-Scan is an in-the-cloud defence shield that protects against the latest zero-day threat. It operates by continually analyzing global threat intelligence obtained in real-time from virtual honeypots and security partners and releasing its own signatures to protect against emerging threats within seconds.



Industry best response times of just **3 seconds**, which is up to 4,200 times faster than other typical anti-virus solutions



250,000+ virtual honeypots deployed in the cloud for threat intelligence gathering



Augmented with global threat intelligence from 70+ security partners to extend the number and breadth of signatures available



## Anti-Spam and Email Protection

The Network Box mail scanning engines scans and blocks spam and other malicious emails from entering your network. In addition to spam detection, the system also comprehensively scans emails for malware, intrusion, and company policy compliance. Supports **SMTP**, **POP3**, and **IMAP** email protocols



25 Engines30 million+ Spam Signatures



Industry-leading spam detection accuracy with a low false-positive rate



Extremely configurable - individual engines can be enabled or disabled based on your requirements

# DLP

#### **Data Leakage Prevention**

The Network Box DLP system scans and blocks outbound SMTP mail that may contain sensitive company data such as your client information, account details, commercial secrets, and document files. The DLP rules and policies can also be customized to ensure more effective prevention.



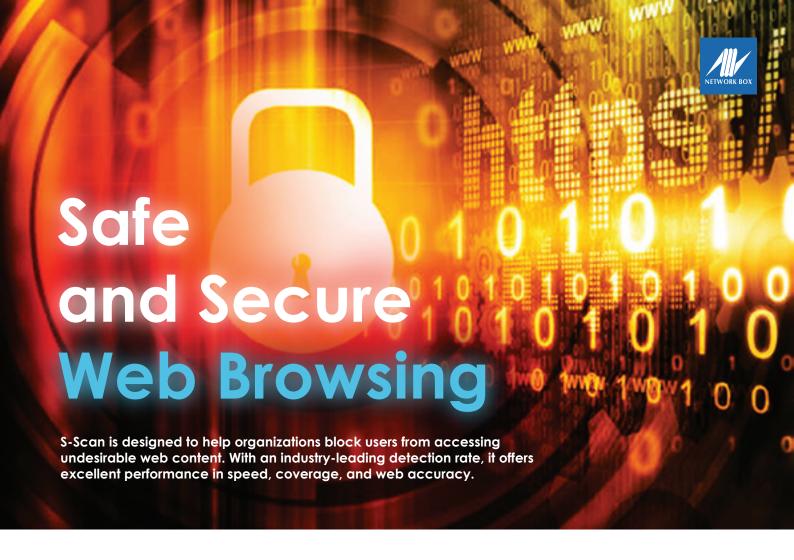
Customizable rules and policies



Sophisticated pattern matching and content analysis



Scripting capabilities



# S-Scan

#### **Web Content Filtering**

S-Scan uses high-performance signature-based technology, rather than a simple URL database, to identify web content more efficiently and effectively. Thus, specific categories of new undesirable websites can be identified almost immediately in real-time, without the need to update a URL database.



15 Engines 7.7 million+ Signatures



Uses high-performance signaturebased technology



Real-Time identification and classification of web content

#### S-Scan uses 60 categories to identify and classify web content:

- Adult / Sexually ExplicitAdvertisements & Popups
- Alcohol & Tobacco
- Blogs & Forums
- Business
- Computing & Internet
- Criminal Activity
- Downloads Education
- Entertainment
- Fashion & Beauty Finance & Investment
- Food & Dining
- Games
- Government
- Malware
- Phishing
- HackingHealth & Medicine
- Hobbies & Recreation Hosting Sites
- Illegal Drugs
- Infected LAN Botnet Command and Control
- Infrastructure
- Intimate Apparel & Swimwear
- Job Search & Career Development

- Kid's Sites
- Motor Vehicles
- News
- Peer-to-Peer
- Personals & DatingPhilanthropic & Professional Orgs.
- Phishing & Fraud Photo Searches
- Politics
- Proxies & Translators
- Reference Religion
- Ringtones / Mobile Phone
- Downloads Search Engines
- Sex Education
- ShoppingSociety & CultureSpam URLs
- Sports Spyware
- Streaming Media
- Suspicious URLs Tasteless & Offensive
- Travel
- Uncategorized
- ViolenceVirus / Malware Infected
- WeaponsWeb-based Email

#### However, the ultimate settings are entirely under your control. With S-Scan, it is also possible for you to:

- Turn all web content filtering off for your entire organization
- Only filter web content for specific user groups
- Only filter certain subsets of categories for all or specific user groups
- Filter certain web content during business hours, and turn off the content filtering during non-business hours



## **Anti-DDoS**

# Anti-Distributed Denial of Service

The Anti-DDoS WAF engine mitigates Distributed Denial of Service (DDoS) attacks to keep 'bad traffic' at bay. In contrast, 'good traffic' is allowed through to secured web-facing servers. By using real-time automated fingerprinting to identify and blacklist attacks, the engine takes milliseconds to respond to brute force/botnet attacks that typically come from thousands of sources.



High-performance blocking - millions of data packets blocked per seconds



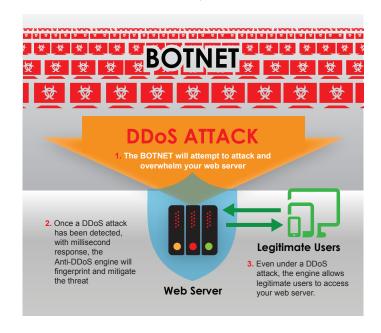
Slows down attacks by a factor of 1,000



Millisecond response to brute force attacks

#### The Anti-DDoS engine offers DoS / DDoS mitigation facilities for the following:

- Total connections limiting
- Total connection rate limiting
- Per-source connections limiting
- Per-source connection rate limiting
- Per-source-per-method rate limiting
- SYN cookies for SYN flood protection





# Next-Generation Protection

With a database of over 6,000 rules combined with anti-malware and IP signature databases, the engine can identify and protect against several million types of threats.

# **WAF**

#### **Web Application Firewall**

The WAF engine protects web servers against web application-based attacks, including the OWASP Top 10 as standard. The engine uses an extensive rules database combined with anti-malware and IDP signatures. Furthermore, the engine also allows for the real-time installation of emergency virtual patches at the gateway to detect and prevent any application or web server-specific security issues.



Real-time automated fingerprinting to identify and blacklist attacks



Uses an extensive combined database of rules signatures to identify several million threats



Up to 15,000 fully analyzed transactions per second

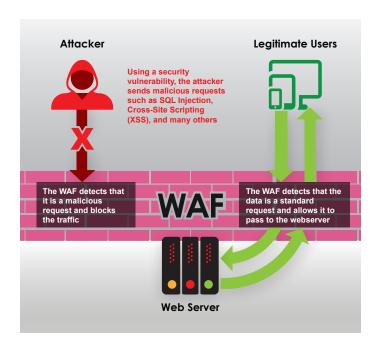
## The Network Box WAF engine offers protection for two application groups:

#### **Standard Applications:**

Apache, IIS, Joomla, Drupal, MediaWiki, WordPress, etc.

#### **Custom Applications:**

Tailor-made software that has been specially developed for a specific organization or specific users/user groups.





# Encrypted Secure Data Exchange

Without a secured connection between your Internet endpoints, hackers can intercept and steal your communication and data.

#### VPN-5Q



The VPN-5Q is a fanless VPN device designed to secure connections between Internet endpoints. It is lightweight and has a slim style design to fit any space-limited environment, making it an ideal and cost-efficient solution for homes or small branch offices.

# Ruggedized VPN Virtual Private Network

The Virtual Private Network (VPN) engine secures connections between Internet endpoints to ensure data remains secured and confidential during Internet exchange. In addition to providing graphical representation and control of the VPN, the engine has been ruggedized to handle ISP and other fundamental connectivity issues.



Supported VPN Technologies: PPTP, IPSec, SSL-VPN



Authenticated user sessions



Global Monitoring Sensor with a visual display of VPN links

#### Visual VPN

With the Network Box HTML-5 Dashboard, all the VPN types have been unified into a single unified framework for centralized status reporting and control.

- Configurability of VPN types
- Reporting on VPN availability
- Capability to start/stop/restart VPN tunnels
- New Global Monitoring Sensor for VPN links





# Application Scanning and Control

While traditional firewalls block IP addresses and ports, the Network Box Application Scanning and Control engine analyzes web traffic at the data level to identify the application responsible for that traffic. Once the application has been identified, rules and policy control can be applied.



Supports over 1,900+ web applications



Customizable policy rules and granular control of applications



Encrypted SSL traffic can also be identified and controlled

#### **Enhanced Policy Control**

When the application has been identified by the engine, by using the rules system, different company policies can be applied to allow better control of the user's web access:

#### **Time-Based Control**

Allow users to access certain websites only during specific times of the day.

**Example:** Users can only access social media sites during non-working hours.



#### **User-Level Control**

Only specified users/user groups are allowed access to particular websites.

**Example:** The company's marketing department can access social media sites all day, but other user groups cannot access it/ can only access it during non-working hours.

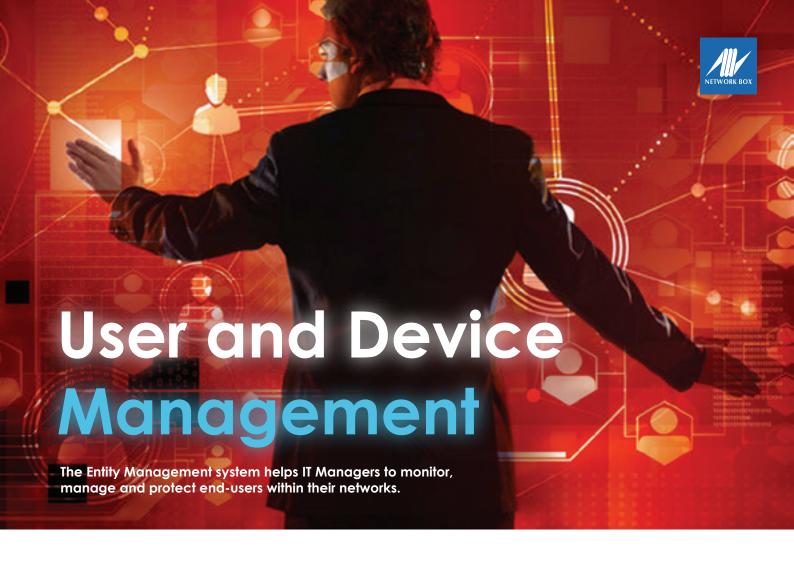


#### Granular Control

Users can access certain websites but may have restrictions within the sites.

**Example:** Users can access Facebook but cannot use specific applications such as chat or games.





# Entity Management

Entity Management allows you to group all your network users' devices, such as iPads, iPhones, laptops, desktops, and VOIP phones, into a single entity. Attributes such as MAC addresses, IP addresses, and email addresses are then tracked, as well as the network resources they utilize. Based on the entity, comprehensive reporting and policy control facilities are then made available.



All devices belonging to an individual end-user can be grouped into a single entity



Presents a single holistic view of the activity of each of the entities



Allows easier monitoring, management, and protection of your users and network

## The Holistic Approach to Monitoring and Management

The revolutionary Entity Management engine completely redefines how users and devices are monitored and protected. The system presents a holistic view of the activity of each entity in your network. For example, calling up 'user X' will show all firewall blocks, web accesses, network usage, and email; across the user's desktop, laptop, phone, tablet, and remote VPN.

The entity model itself is built and maintained by automated systems. It is an extremely efficient and effective technology to help you monitor, manage and protect your users and networks.



■ Entity Dashboard Screen



# **Customized Reports**

With Network Box, all actions and events are logged and audited to ISO standards. A central, unified logging system collects data throughout the system, which can generate reports. These reports are data-rich and contain information on time and time zone, information on host and origin, and are unlimited in scope.



Allows you to create instant real-time reports or reports covering a set time-frame



Available formats: PDF, CSV



KPIs let you to see what is happening in real-time and what has happened over any given time-frame

#### **Key Performance** Indicators (KPIs)

The Network Box Reporting systems have been enhanced to leverage the concept of Key Performance Indicators (KPIs). Each Network Box hardware unit comes with predefined KPI weekly reports, which provide a weekly summary of events and actions within your network. Using the Network Box Dashboard, this can be customized for more granular control.

With KPIs, it is possible to make a comparison between any two defined periods. This facility is very useful to see if workloads are increasing over time, for example, to see how many more emails are being scanned by the system this week than in the same week last year.

#### **Network Box KPIs includes:**

- Network (INTERNET) utilization
- Network (LAN) utilization
- Network (DMZ) utilizationNetwork (VPN) utilization
- DISK utilization
- CPU utilization
- Network Firewall connections denied
- Web Client requests madeWeb Client requests denied
- Web Client URL categories
- Web Client Threats
- emails received
- emails denied Outgoing emails sent
- Outgoing emails denied
- Incoming emails received Incoming emails denied

- email SPAM blocked
- mail MALWARE blocked
- email POLICY blockedemail DLP blocked
- VPN SSL site-to-site connections made ■ VPN SSL client connections made
- VPN SSL site-to-site percentage uptimeVPN PPTP connections made
- VPN IPSEC connections madeVPN IPSEC percentage uptime
- Frontline IPS attacks denied
- IPS attacks denied
- IDS attacks detectedWORKLOAD utilization
- and many more.



# Infected LAN

The Infected LAN engine helps pinpoint infected workstations, servers, and networked smart devices in your network's LAN/DMZ areas. While other engines can detect access to malicious content, the engine explicitly scans outbound traffic to identify botnet access from your network. Once identified, the engine can be configured to quarantine infected systems automatically.



Identification and dynamic blacklisting of infected systems



Detection of outbound access to known botnet and malware sites



Highly-granular detection for highly-prolific malware

# SSL Proxying

Secure Sockey Layer (SSL) is a cryptographic protocol used to secure communications between Internet endpoints, which can be vulnerable if not correctly configured. Through analysis of the SSL connection and the protocol data, the SSL Proxy takes the responsibility of securing connections going through the gateway and applies the company-wide security policy on these secured communications.



Identification, decryption, encryption, certificate validation, and protection of SSL network traffic



Denies end-users from bypassing failed SSL certificates



An SSL proxy, supporting HTTPS, SMTPS, POP3S, and IMAP4S protocols in both direct and STARTTLS modes



# Be connected regardless of connection

types

Zero-touch provisioning technologies to help you connect to your different networks regardless of network configuration, environment, and connection type.



IPv6 Ready Core Phase-2 Certification

Network Box is the first provider of Managed Security Services to have had its proprietary managed security service delivery platform attain IPv6
Ready Core Phase-2
Certification.

## **SD-WAN**

#### Sofware-Defined Wide Area Network

The Network Box SD-WAN optimizes network traffic and allows organizations to easily connect between head office and branch offices, data centres, and cloud services/applications, regardless of network environment and connection type. SD-WAN services are provided by on-premises Network Box devices, virtual cloud, and multi-tenanted SaaS services.



Provides QoS and Security Technologies: Traffic Prioritisation, Traffic Shaping, and Traffic Policing; with UTM+ services



Supports various network connection types and configurations: MPLS, Lease Line, Broadband, Hub-and-spoke, Mesh, Hybrid combinations, etc.



Centralized administration of the SD-WAN, including configuration, link status monitoring, alerting, and reporting

# IPv4 / IPv6 Bridging

The Network Box IPv4 / IPv6 Bridging engine supports bi-directional translation between IPv4 and IPv6 protocols, allowing IPv4 clients to connect to IPv6 servers and vice-versa. It is designed to help organizations with their migration to IPv6 while integrating naturally with any IPv4 network.



Certified to IPv6 Ready Core Phase-2 Protocol standard



Dual-stack interception mechanism with outgoing protocol translation



IPv6 Border Gateway Protocol offered as a service



# In-the-Cloud Backups

The Network Box Cloud Email Backup and Cloud DNS Backup services help alleviate problems due to network outages and ISP-related connectivity issues. Thus, with Network Box's global network of cloud backup servers, you are assured of business continuity and service reliability.



#### Cloud Email Backup

Lost or bounced emails can affect business continuity. The Network Box Cloud Mail Backup service can alleviate this business risk by backing-up undeliverable incoming emails in the cloud. Thus, if there is a problem with your ISP, internal network, or email

server, incoming emails will be stored in the cloud and delivered to you when the issue has been resolved.

- Backup storage only if your email servers are overloaded and temporarily not accepting new connections/emails
- Once delivered, the emails are removed, and the system will only retain the logs (containing date, time, sender, and recipient)



**3 Geographical regions:** America, Europe, and Asia



Backed-up emails are removed once they are delivered



Full control of which domains will use the cloud DNS backup service



#### **Cloud DNS Backup**

Web and mail traffic can be severely affected if your DNS server suffers an outage. The Network Box Cloud DNS Backup service helps mitigate this by allowing you to use Network Box's extensive network of DNS servers to provide backup in the cloud. In addition

to providing a security-hardened DNS solution, it is a faster and more reliable service than traditional ISP or in-house DNS servers would be able to offer.

- Full control over which of your domains will use the service
- Full control over which cloud backup servers to use for your domains
- Only the DNS records themselves, as well as statistical logs, will be stored on the Cloud DNS Backup servers.



# **Cloud Domian/IP**Reputation Service

This optional add-on service allows you to register your domain names and public IP address subnet ranges. The information is then entered into the Network Box Cloud Reputation Service database. From then onwards, Network Box will continually monitor the domains and IP addresses to ensure they are not blacklisted in public reputation lists.



Full control over which domains / IP addresses will use the service



Continuous monitoring against cloud reputation services and notification (via GMS ticketing) of any reputation issues found



Augmented with the Network Box Reputation DataBase (RepDB) to ensure that you are not blacklisted

### Cloud SSL Reputation Service

As more services adopt SSL encryption standards and the Public Key Infrastructure (PKI), managing the associated SSL certificates has increasingly become an issue for many organizations today. Expired certificates, browser warnings, and users unable to access your services can result from mismanagement. Certificate Authorities have also complicated the issue with their short validity certificates reliant on automated renewal. To address these issues, Network Box has the following:



#### Cloud SSL SERVER Reputation Service

The service lets you enter the connection details for your publicly accessible SSL servers and monitor the certificates those servers host. The service then checks certificate signing validating, Server Name, expiry date, and

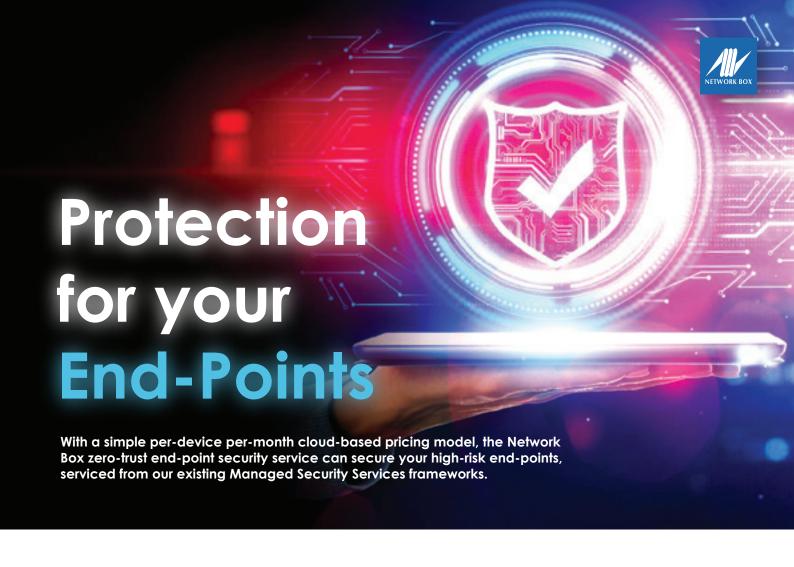
other attributes. Should any issues be found, a GMS incident is raised to alert you. For upcoming certificate expiry, the system will, by default, warn 30 days before expiry and alert critical seven days before expiry.



#### **Cloud SSL CERTIFICATE Reputation Service**

The service is designed for non-public SSL services and their certificates. It is commonly used for private services or private self-signed CA certs used in a private PKI infrastructure. To use this service, you upload the certificate,

and the system will automatically monitor it, similar to the Cloud SSL SERVER Reputation Service.



# Managed Zero-Trust End-Point Security

In addition to providing protection at the gateway, Network Box can offer managed zero-trust end-point protection. The approach involves installing a small zero-trust end-point agent on end-point devices. Once installed, the service will block unrecognized applications by default, only allowing those you specifically trust.



Blocks all untrusted applications regardless of source, location, signature, etc.



Trust policy is managed and maintained by Network Box SOC



Allows you to generate reports of all applications running within your network

#### **Service Overview**

The table below highlights the key advantages of the Network Box Managed Zero-Trust End-Point Security solution.

#### **Functions**

#### Managed Zero-Trust End-Point Security

#### Whitelisting Approach

- Blocks execution of EVERYTHING not trusted
- Truly effective protection without relying on outdated anti-virus signatures
- Protects all sources (USB, disk, file shares, downloads, etc.)
- In or out of the office, online or offline; protection without relying on updates

#### Managed by Network Box Security Engineers

- Maintenance of trust settings, according to customer policy
- Handling of application updates
- Handling of request workflow (new application install, etc.)

#### Reporting and Visibility

 Of all applications being executed by your end-point devices



# Dark Web Monitoring Service

Whenever there is a data breach, the stolen personal information and data usually ends up on the Dark Web. The Dark Web Monitoring engine periodically scans data breaches from the Dark Web, looking for your registered email addresses and domains. As an ongoing subscription service, Network Box will inform you if your credentials have been discovered there.



Regularly scans the Dark Web for postings of your registered domains and email addresses



Ongoing monitoring and notification, with detailed reports of data breaches found on the Dark Web



Optional monitoring services for the personal email accounts of key staff within your organization

#### What is the Dark Web?

The Dark Web is the deliberately hidden part of the Internet and is the natural habitat of hackers and cybercriminals. This 'dark side' can only be accessed with specialist knowledge and specific software tools such as TOR (The Onion Router), Riffle, Freenet, and I2P (Invisible Internet Project).

- Only 4% of the Internet is publicly accessible and indexed by standard search engines such as Google, Yahoo, or Bing. This is known as the Surface Web.
- The other 96% of the Internet comprises the **Deep Web**.
- Within the Deep Web, there is a subset of **Dark Nets**.
- It is the collection of these Dark Nets that makes up the **Dark Web**.

The

Surface

Web

Deep Web



# HTML-5 Dashboard

The Network Box HTML-5 Dashboard gives you real-time visual feedback of both cyber attacks and your network status. Made up of hundreds of different widgets, it is fully customizable, and the layout can be changed to give you complete control over how you want to monitor your network.



A highly customizable dashboard that provides an intuitive visual representation of your network status and cyber attacks



Instant real-time reports, or reports covering a set period, can be generated via the dashboard



KPIs let you see what is happening in real-time or what has happened over any given time-frame

#### **Network Box Dashboard Screens**

The layout of the dashboard can be customized to show different aspects of your network.



■ Main Overview



■ Box Statu



■ Top Mail Users Overview



■ Network Activity

#### **Real-Time Portable Monitoring**

The Network Box Dashboard is compatible with almost any modern large-screen mobile device. This allows you to constantly monitor your network's status even when you are away from your workstation.





## **NBSIEM+**

# Security Incident and Event Management

Delivered as a hybrid cloud/on-premises or pure cloud-based solution, NBSIEM+ integrates all the security logs and incidents into one centralized system to provide an overview of the entire network and can apply Integrated Security Intelligence, Digital Forensics, and Security Incident Management.



Powerful online search facilities for events, incidents, assets, and more



Real-time correlation of security incidents to provide a holistic view



Notification and alerts for critical security events

# Mobile SIEM+





Mobile SIEMfor Android

Mobile SIEM+

Available for both Apple iOS and Android-based mobile devices, the FREE Network Box SIEM+ App is designed to provide secure access to administer Network Box managed services.

#### In addition, the app provides access to the following:

- Security news stories
- Box Office ticketing system
- NBSIEM+ events
- Overview of managed assets



Provides access to the NBSIEM+ portal



Full access to the Box Office ticketing system



Support for both Android and iOS mobile platforms



## **Network Box Focus**

The latest Network Box news and updates

network-box.com Issue #135

# **FEB 2024**

#### **Network Box Hong Kong Cybersecurity Panel Discussion**

Network Box's Managing Director, Michael Gazelev. participated in a cybersecurity panel discussion titled. **Building Network Security Barriers Together – Creating** a New Chapter for Smart Cities, at HK Cyberport. During the discussion, panelists shared cases and experiences in enhancing cybersecurity to enable a safer and more conducive network environment for applying technological innovations, thus advancing smart city development.





#### **Network Box** Year in Focus 2023



As a special end-of-year summary, Network Box has compiled all the key events of the last twelve months in the 2023 edition of Year in Focus.

LINK:

https://bit.ly/3w16TKi

#### In the Boxing Ring February 2024

This month, we are talking about Ransomware Delivery Protocol (RDP) and others. Although this is a play on words for Remote Desktop Protocol, the security risks that it represents cannot be overlooked. Among every ransomware case that Network Box has been called in to assist with over the past five years, RDP has been the #1 mechanism for network infiltration and eventual ransomware delivery. Whilst being the worst offender, RDP is far from the only problematic such service. In our featured article, we discuss this in greater detail and provide a few best practices to alleviate these threats.

https://mcdn.network-box.com/ltBR/2024/ITBR-202402.pdf





#### Global **Security Headlines**

#### **Dark Reading**

Critical Cisco Unified Communications RCE Bug Allows Root Access LINK: https://bit.ly/42nKsep



#### **Bleeping Computer**

TeamViewer abused to breach networks in new ransomware attacks LINK: https://bit.ly/3wcGhpt



#### **Security Week**

After Delays, Ivanti Patches Zero- Days and Confirms New Exploit

LINK: https://bit.ly/3Ut31vv



#### **The Hacker News**

Cloudflare Breach: Nation-State Hackers Access Source Code and Internal Docs LINK: https://bit.ly/3SKB5Sx



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