Welcome to the November 2013 edition of In the Boxing Ring

This month, Network Box is pleased to announce the launch of Network Box’s new managed security platform, Network Box 5 (NBRS-5.0). The state-of-the-art Network Box 5 software platform, consists of more than one-point-one million lines of code; representing more than one hundred and thirty eight thousand hours of highly dedicated research and development.

A truly enormous amount of hard work has gone into optimizing this code, the algorithms, and technologies used. All this dedication and effort, has resulted in the new Network Box 5 software platform, being up to 8 times faster, than the previous Network Box 3 (NBRS-3.0) software platform.

Network Box has also launched a new set of 64-bit hardware units. Every model is based on multi-core CPUs, fully supports Hyper-Threading Technology and utilizes high speed DDR3 RAM. The Network Box 5 hardware range, is designed to offer exceptional performance and reliability.

Every aspect of the new system’s design; security, speed, granularity, transparency, functionality, scalability, monitoring, control, customization, and reporting, have all been enormously improved in almost every way possible.

To compliment the software, Network Box 5 hardware product lineup is the culmination of years of planning and development. We highlight the key features of the new models here.

Mark Webb-Johnson
CTO, Network Box Corporation Ltd.
November 2013

You can contact us here at HQ by eMail (nbhq@network-box.com), or drop by our office next time you are in town. You can also keep in touch with us by several social networks:

Twitter: http://twitter.com/networkbox
Facebook: http://www.facebook.com/networkbox
LinkedIn: http://www.linkedin.com/company/network-box-corporation-limited
Google+: https://plus.google.com/u/0/107446804085109324633/posts
Network Box 5
Software Platform

Network Box 5 is Next Generation Managed Security. It takes our core foundational UTM+ (Unified Threat Management) appliance and services, along with ten years of Intellectual Property and experience, into a new enhanced platform, which expands beyond traditional UTM+ capabilities.

On Friday 1st of November 2013, Network Box officially launched the new managed security platform Network Box 5 (NBRS-5.0). The new platform has been optimized and performance has been enhanced to be to eight times faster than the previous (NBRS-3.0) platform. In addition, numerous additional and improved technologies have been added to the platform, including:

- Entity Management
- Application Identification
- Holistic
- SSL Proxy
- Anti-DDoS
- Web Application Firewall
- HTML-5 Dashboard
- Unified Configuration
- Transparency
- 802.1D Bridging
- Clustering
- IPv4/IPv6 Bridging
- Protocol Translation
- Multi-Core
- Distributed Scanning
- SSL Policy Enforcement
- Parallelized Scanning
- Unified Logging
- Configuration Audits
- Revision Control
- Bi-Directional Synchronization
- Device Provisioning
- Data Export
- Layer 7 Policies
- Web Sessions
- and many more...

During the official launch event, in keeping with the Network Box 5 theme, five key technologies were highlighted.

Anti-DDoS
WAF+

Unlike many dedicated Web Application Firewall systems on the market, the Anti-DDoS WAF+ includes a wide range of capabilities to allow for the mitigation of Distributed Denial of Service (DDoS) attacks.

It utilizes the OWASP top ten as a minimum set of guidelines which need to be adhered to.

The defensive strength of the default settings are maximized, and augmented by the power and accuracy of a state-of-the-art real-time automated threat fingerprinting engine. This ensures as many incoming threats can be blocked as possible, using the minimum of effort; brute force protection is built-in as standard.

In the event of a newly discovered web application vulnerability being revealed, or an actual attack taking place, the Anti-DDoS WAF+ allows for the real-time installation of emergency virtual patches at the gateway, in the form of specific WAF rules, to immediately detect and prevent any specific security issues.

- Real-Time Automated fingerprinting
- Slows down attacks by a factor of up to 1,000
- Millisecond response to brute force attacks
- High performance rules engine capable of millions of rule-checks per second
- Up to 15,000 fully analyzed transactions per second
- Support for major Content Management Systems including: Joomla, Drupal, and Wordpress
Entity Management

Network Box 5 offers a revolutionary Entity Management system, which completely redefines how users and machines are monitored and protected.

Entities are Users and Devices that are parts of your network. Network Box 5 tracks these entities, their attributes (such as MAC addresses, IP addresses, email addresses, etc.), and the network resources which they utilize.

Rather than presenting a set of disparate screens, showing firewall blocks by IP address, URL access by authenticated user, and email by email address, the Network Box 5 platform presents a single holistic view of the activity, of each of the entities in your network. For example; calling up user “Joe,” will show all his firewall blocks, web accesses, network usage, email, etc.; across his desktop, laptop, phone, tablet, and remote VPN.

The entity model itself is built and maintained by automated systems, and is an extremely efficient, and effective, technology, for helping IT Managers to monitor, manage, and protect, their users and networks.

- Presents a single holistic view of the activity of each of the entities in your network.
- Built and maintained by automated systems.
- Allows IT Managers to monitor, manage, and protect, their users and networks.

Secure Socket Layer (SSL) Proxy

SSL is the technology used to provide security to web browser and web application communications. However, as with any modern technology, SSL can suffer from security issues of its own, because of problems with its design, or flaws in its implementation.

Regardless, the very fact that SSL data streams are encrypted, means that without SSL-Proxy technology, it is all but impossible to scan such data streams for viruses, worms, spyware, and other undesirable content.

- Provides security to web browser and web application communications
- Allows certificate validation policy to be performed and enforced at the gateway
- SSL traffic is identified, decrypted and then subjected to security functions

Application Identification

While traditional firewalls block protocols, and ports, Application Identification looks at the traffic up to and including layer 7 to identify the application responsible for that traffic.

Once identified, policy control can be applied to that traffic. The traffic can also be ‘promoted’ – for example HTTP traffic detected on ports other than tcp/80 can be promoted to be handled by the web client scanning modules for anti-malware and policy control. Integrated to the SSL proxy, even traffic inside encrypted SSL sessions can be identified and controlled.

The Network Box 5 application identification engine, comes in both Lite and Full versions. The Lite version is included as standard with every UTM+ system; while the optional Full version is available as an upgrade. The new Application Identification system allows connections to be appropriately labelled for reporting and policy control.

- Encrypted SSL sessions can be identified and controlled
- Layer 7 traffic analysis
- Policy control can be applied to traffic

HTML-5 Dashboard

The Graphical User Interface has been updated with a state-of-the-art customizable HTML-5 Dashboard.

The new Dashboard offers IT Managers highly intuitive visual feedback, that is very easily understood and acted upon.

Due to HTML-5 being compatible with almost every mobile device on the market, the information conveyed by the dashboard is not only real-time in nature, but can be seen from almost any mobile device.

The system is also capable of automatically generating highly customizable Adobe PDF format reports. All users need to do, is create a dashboard screen showing the information they require, then tell the system to generate a report, or regular reports, matching the timeframe required.

- Real-Time Attack Monitoring
- Supports almost any Mobile Device
- Customizable Dashboards
Network Box 5
Hardware Platform

For the release of the Network Box 5, the hardware product lineup has undergone a complete makeover. From the S-Series, to the E-Series, all models have received extensive re-evaluation, transitioning to all new hardware platforms that not only provide an increase in performance, but also make a revolutionary jump in terms of key technologies such as CPU and RAM architecture.

Overview

The new Network Box 5 hardware lineup brings much of the technologies that were previously present only in the Enterprise grade products, down to all product levels. Technologies such as 64bit, Multi Core CPU architectures, DDR3 RAM and multi queue network devices. These technologies are now standard in S-Series and M-Series for the first time, and not just reserved for the E-Series only. What this represents is a unification of the entire Network Box product line that is unprecedented in the company’s history, where the difference between each class of hardware is minimized from the point of view of the Software.

Additionally, by synchronizing the re-evaluation of all models, Network Box 5 is able to go to market on hardware platforms that all have a similar lifetime of manufacture, reducing the mixture of old and new that existed during the course of previous Network Box product cycles.

In terms of raw features, all Network Box 5 models make a significant step over previous generation models. Overall highlights include:

- Increased CPU speeds, with all models supporting 64bit multi core CPUs
- Minimum of 4GB of RAM in ALL models
- 4,000,000 hour MTBF solid state drives as primary system storage
- Minimum of 1TB secondary storage capacity for all rack mounted models
- Network controller chipsets featuring multiple hardware transmit and receive queues
S-Series
- S-35i
- S-95i

For the first time, 64bit comes to the S-Series, completing a transition to 64bit computing that Network Box was one of the first vendors in the world to start almost nine years ago.

The S-Series also comes with 4GB of RAM, a quantity previously only reserved for the E-Series. This combined with the 64bit, dual core Atom CPU, moves the performance of the S-95i into an exciting new level.

M-Series
- M-255i
- M-295i
- M-385i
- M-395i

With the M-Series, Network Box aims to provide for a wide range of performance and cost considerations, from the M-255i, which is an extension of the cost effective S-Series hardware but in a rack-mounted configuration with expanded storage capacity, to the M-295i and M-385i which provide different outlooks on the price/performance sweet spot where Network Box has seen the most positive reception from the market.

In addition, Network Box is offering the new M-395i, which ventures into near Enterprise CPU performance and RAM and disc capacity, but without redundancy, in a 1U rack mountable configuration.

E-Series
- E-1000i
- E-2000i
- E-4000i
- E-8000i

The E-Series hardware lineup transcends the definition of mere Network Appliance, into the realm of High Performance Computing. Each of the E-1000i, E-2000i and E-4000i offers dual socket, multi core CPU configurations, and supports high performance 8 Transmit/Receive queue network adapters.

The new E-Series supports massive RAM capacity: 8GB, 16GB and 32GB for each of the models respectively, and disk capacities of 4TB by default, optionally expandable to 16TB by means of a hardware RAID addon card.

For specially negotiated orders, Network Box is offering a new E-Series model: The E-8000i, which comes with a massive 16 core CPU configuration, and RAM capacity up to 128GB.

Conclusion
The Network Box 5 hardware product lineup is the culmination of years of planning and development. It is as important a feature of the Network Box product line as any of the well documented software features such as Anti-DDoS WAF+ or IPv4-IPv6 bridging. It has a very close bi-directional relationship with the Network Box software feature set, influencing a number of design decisions during the development of the software, and conversely, decisions made during evaluation of the hardware platform were driven by features planned for the software.

Exciting times are surely ahead for Network Box, its worldwide distributors and its customers.
The Network Box 5 (NBRS-5.0) UTM+ platform was officially launched on Friday 1st November 2013, complimenting the Network Box 5 Anti-DDoS WAF+ system launched at the end of last year.

To accompany the new platform launch, an entire new Network Box 5 range of hardware appliances was also launched at the same event.

During the event, Hannah Smith, gave a talk about Network Box and its role as a leading global Managed Cyber Security Provider; followed by Quentin Heron, from Network Box's International Division, whom highlighted the key features of Network Box 5.

Mark Webb-Johnson, Network Box's Chief Technology Officer, then gave a detailed talk about a number of additional features from Network Box 5. Technology highlights included: Entity Management, Application Identification, SSL-Proxy, Anti-DDoS WAF+, HTML-5 Dashboard, and IPv4-IPv6 Bridging. Finally, to conclude the presentation, Nick Jones, Network Box's Head of Research and Development, talked about the new Network Box 5 hardware range.
Network Box Five
NBRS-5.0

On Tuesday, 5th November 2013, Network Box will release our patch Tuesday set of enhancements and fixes.

NBRS-5.0 Features
November 2013

Our work this month primarily involves extensions and enhancements to existing security modules, as we prepare for the upcoming release of NBRS-5 UTM+ service packages. The regional NOCs will be conducting the rollouts of the new functionality in a phased manner over the next 7 days. This month, for NBRS-5, these include:

- Release of security modules for Virtual Private Networking
- Release of security modules for Intrusion Detection (IDS)
- Release of security modules for Intrusion Prevention (IPS)
- Release of security modules for SSL Proxy
- Extensions to network high availability system
- Enhancements to web proxy to improve compatibility with some web servers
- Enhancements to Administrative Web Portal, to support reports with large numbers of returned rows
- Enhancements to proxy intercept system, to avoid proxying internal service traffic
- Support for international characters in geolocation city names

In most cases, the above changes should not impact running services or require a device restart. However, in some cases (depending on configuration), a device restart may be required. Your local NOC will contact you to arrange this if necessary.

Should you need any further information on any of the above, please contact your local NOC. They will be arranging deployment and liaison.
NBRS-3.0 Features November 2013

On Tuesday, 5th November 2013, Network Box will release our patch Tuesday set of enhancements and fixes. The regional NOCs will be conducting the rollouts of the new functionality in a phased manner over the next 7 days. This month, for NBRS-3, these include:

- Extensions to mail scanning framework to add detection for some new variants of malware campaigns
- Revisions to Global Monitoring System checks for disk space
- Revisions to Anti-Malware signature PUSH updates
- Various (mostly internal) enhancements to Box Office and support systems

In most cases, the above changes should not impact running services or require a device restart. However, in some cases (depending on configuration), a device restart may be required. Your local NOC will contact you to arrange this if necessary.

Network Box Middle East
Gitex Technology Week 2013

20 – 24 October 2013, Dubai
Network Box Middle East exhibited at the 2013 Gitex Technology Week, at the Dubai World Trade Centre, UAE. Those that attended were introduced to Network Box’s Managed Security Services and Network Box’s UTM+ and Anti-DDoS WAF+ engines. Lead by Salah Aldeen Sabouni and his dedicated team, Network Box Middle East has been providing world class Managed Security Services to customers across the Middle East and North Africa (MENA).

IT PRO Corporate Choice

Network Box won two IT PRO Corporate Choice 2013 awards for Network Box 5 UTM+ and Network Box 5 Anti-DDoS WAF+ systems.