Welcome
Welcome to the June 2012 edition of ‘In the Boxing Ring’!

This month, on pages 2 and 3, we present details on Network Box NBRS-5.0 achieved IPv6 Ready Logo certification and NBRS-5.0 Web Application Firewall.

NBRS-5.0 is designed to assist our customers with their migration to IPv6, not merely to act as an IPv6 device on the network. It is now IPv6 Ready certified to the Phase 2 criteria for the Core Protocols test specification.

Testing a product as sophisticated as the NBRS-5.0 Web Application Firewall is not a simple task. To gain confidence ourselves, and to clearly demonstrate the capabilities of the product to our customers, we have chosen a five stage testing methodology for NBRS-5.0 products: 1) Internal Testing, 2) External Testing, 3) Internal Benchmarking and Performance Tuning, 4) Internal Live Trials, 5) Pilot Projects.

Page 4 details the features and fixes to be released in this month's patch Tuesday for NBRS-3.0. We continue to develop, and will continue to support, NBRS-3.0 for the foreseeable future (several years), and this page will be used to keep you informed as to what is happening with our core product.

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 by several social networks:

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

Mark Webb-Johnson
CTO, Network Box Corporation
June 2012
Network Box IPv6 Ready

The title says it all. On 13th May 2012, Network Box NBRS-5.0 achieved IPv6 Ready Logo certification - based on the the latest Phase-2 4.0.6 test specification.

Our IPv6 Ready ID number is 02-C-000779, and you can find details of this at the www.ipv6ready.org website.

Having demonstrated both compatibility and inter-operability with the ipv6ready system, we’re now moving on to real-world deployments - the first of which will be in combination with the upcoming World IPv6 Launch.

Major Internet service providers (ISPs), home networking equipment manufacturers, and web companies around the world are coming together to permanently enable IPv6 for their products and services by 6 June 2012. Network Box is joining this launch.

Organized by the Internet Society, and building on the successful one-day World IPv6 Day event held on 8 June 2011, World IPv6 Launch represents a major milestone in the global deployment of IPv6.

On 6th June 2012 at 0000 UTC, Network Box, along with major websites such as www.facebook.com, www.google.com, www.bing.com, and www.yahoo.com will be permanently enabling IPv6 on our publicly facing web site (www.network-box.com) and will be reachable over IPv6 from that time. Technically, this is done by the publishing of both AAAA (for IPv6) and A (for IPv4) records in the DNS system. The browser for a workstation with both IPv4 and IPv6 connectivity can then make the decision which protocol to use to reach the target website.

We’ll be publishing an AAAA record pointing to an IPv6-enabled NBRS-5.0 Web Application Firewall - so as well as IPv6 support and IPv6/IPv4 translation, we’ll get protection from web attacks as well as an excellent demonstration of the technology.

It is an exciting time as the first real-world deployments of NBRS-5.0 Web Application Firewall technology start with pilot projects around the world.

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Testing NBRS-5.0 Web Application Firewall

Testing a product as sophisticated as the NBRS-5.0 Web Application Firewall is not a simple task. To gain confidence ourselves, and to clearly demonstrate the capabilities of the product to our customers, we have chosen a five stage testing methodology for NBRS-5.0 products.

1. Internal Testing

In this stage, we test the product both during and after development of each new feature in a regression testing environment, using a test-driven-development methodology. Here, we are looking to ensure core stability, performance and resource utilisation are within acceptable limits, and that the product both performs and continues to perform as expected. After each change to the product, and prior to formal release, automated regression tests are run to ensure no new issues have been introduced. A large portion of this testing involves profiling the product to optimise the performance of the areas of the product most often used and those areas that impact performance the most.

2. External Testing

Once the product is stable and feature-complete, external testers are brought in to ensure that our product meets industry compatibility standards, and performs as expected. A vital aspect of this is the use of external testing data and procedures to widen the scope and depth of the testing. Examples of this include Tolly Group anti-virus testing, and the recently achieved IPv6 Ready Logo certification. Such tests often result in competitive comparisons and formal industry certifications.

3. Internal Benchmarking and Performance Tuning

Prior to release, we conduct internal benchmarking and performance tuning. The goal here is to measure the performance of our product in simulated real world conditions with simulated real world data, and to publish those results both as technical white papers and product key point performance metrics. Historically, the problem here has been the use of real-world data. When conducting such testing it is common for our competitors to use small ‘hello world’ test samples, and even within our customer base, the size and complexity of the messages passing through the box demonstrate considerable variance. For this reason, Network Box usually publishes an indicative range of performance figures - at the lower end the performance of ‘hello world’ style messages is shown as the best possible outcome, and at the higher end, a representative sample of real world live data (proportioned to match the messages our typical, average, customer would see) is used to show the average outcome.

4. Internal Live Trials

Dogfooding (also known as ‘drinking your own champagne’) is a methodology that Network Box adheres to, as early in the product development life cycle as possible. It involves forcing those of us who design and develop products to actually use and rely on them in our day to day work. To eat their own dog food, or drink our own champagne. This allows us to see the behavior of our product in our customer’s eyes, experiencing problems and gaining valuable experience well before the product reaches customer hands. The fact that for the past six months, all the IP traffic from my work station has gone through a NBRS-5.0 device in bridge mode, and our participation in the world IPv6 Launch, are just two examples of this approach. By the time you read this, all the traffic for www.network-box.com (both IPv4 and IPv6) will be protected by a Network Box NBRS-5.0 Web Application Firewall, live on the public IPv4 and IPv6 Internet.

5. Pilot Projects

The final stage of testing involves pilot deployments of the product in live customer environments, and is the most important stage for us here at Network Box. It is only by seeing the product behavior in real world environments, across a diverse customer base facing a variety attacks and problems, that we can truly see how the product behaves and receive valuable feedback from our customer base. Testing to ensure product quality and performance objectives are met is not a one-stage process. Rather, it is an on-going and critical key component to Network Box product development.
June 2012 Features

On Tuesday, 5th June 2012, 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, these include:

- Enhancements to various internal NOC systems
- Improvements to IDPS system, to permit whitelisting of IP address ranges
- Revisions to my.network-box.com administrative interface
- Further support for NBRS-5.0 in Box Office systems
- 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.

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

NETWORK BOX | World IPv6 Launch Day

Network Box is very pleased to announce that it is the first, and so far only, provider of Managed Security Services, to have had its proprietary managed security service delivery platform attain IPv6 Ready Core Phase-2 Certification. IPv6 Ready is an internationally recognized certification that is awarded to vendor products after they undergo a comprehensive set of tests that measure the compliance of the products’ IPv6 networking stack against constructs, features and behaviours defined in the official IPv6 internet standards. For this reason, full IPv6 support and innovation are foundational aspects of the entire upcoming Network Box version five (NBRS-5) product line.

"The first Network Box managed security service to launch which uses the new Network Box version five IPv6 certified security platform, is our new Anti-Distributed Denial of Service, Web Application Firewall," added May Chan, Network Box’s Marketing Director.

"Distributed Denial of Service attacks have been making front page news right across the globe. Therefore enhanced DDoS mitigation is very high on the list of security features which IT Managers are looking for right now."

MAY 2012 NUMBERS

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