In the Boxing Ring

Network Box Technical News
from Mark Webb-Johnson, CTO Network Box

Welcome to the
January 2015 edition of
In the Boxing Ring

Happy New Year to you all. 2014 marked another incredible year for Network Box. Not only did Network Box 5 win numerous awards around the world including a highly prestigious Computer Technology Review Top 25 Must Have Software Applications Award 2014, and the CIO Choice Award 2014 at the IT Pro Corporate Choice 2014 Awards; Network Box was listed as a ‘Notable Vendor’ by Gartner. These, and many other Network Box achievements, are highlighted in our end of year review: Year in Focus 2014, which can be downloaded using the link on page 5.

This month, following on from the launch of our Cloud Mail Backup, two months ago, we are pleased to announce the launch of our second cloud service: Cloud DNS Backup. This is discussed in further detail on pages 2 and 3.

On pages 4-5, we highlight the features and fixes to be released in this month’s patch Tuesday for Network Box 5 and Network Box 3. We continue to develop, and will continue to support, Network Box 3 for the foreseeable future (several years).

Mark Webb-Johnson
CTO, Network Box Corporation Ltd.
January 2015

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

In this month’s issue:

2–3
Cloud DNS Backup

The Cloud DNS Backup allows customers to use Network Box’s extensive network of cloud DNS servers to provide backup DNS in the cloud. By using this service, DNS queries can be responded to, from the cloud, even if the Internet link to the master DNS server in the LAN/DMZ is down.

4–5
Network Box 5 and Network Box 3 Features

The features and fixes to be released in this month’s patch Tuesday for Network Box 5 and Network Box 3. We continue to develop, and will continue to support, Network Box 3 for the foreseeable future (several years).

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Network Box Highlights:

- Network Box
  IT Pro Corporate Choice Awards 2014
- Network Box USA
  Security Trends and Predictions for 2015
- Network Box Australasia
  Formula SAE-Australasia
- Network Box – Year in Focus 2014
In the Boxing Ring
January 2015

Two months ago, we announced the launch of our Cloud Mail Backup service and since then have been rolling this out globally to our Network Box 5 customer base. Since then, we’ve also added a country-level cloud backup centre in Germany (which provides the option to keep the eMail within Germany for those European customers with privacy concerns).

As we promised then, Cloud Mail Backup was just the first of many cloud services to be launched in the coming months, and this month we’re pleased to announce the launch of our second cloud service - Cloud DNS Backup.

A DNS Server on the Box

With this month’s patch tuesday update to Network Box 5, we’re releasing a DNS recursive resolver to the Network Box 5 platform. Based on an enterprise-grade DNS server, this allows the box itself to recursively resolve DNS queries itself (without relying on external recursive resolvers, and able to operate off the root level DNS servers themselves). This service can also be offered to workstations and servers on the LAN/DMZ (so such machines can use the Network Box at the gateway as their specified DNS server).

Building on that, we’ve also released this month an optional network-dns-server security module. This security module provides the capability to configure DNS zones as either master or slave, on the Network Box itself. The Network Box will serve queries to those zones in an authoritative manner.
DNS Servers in the Cloud

To further extend the capabilities of this system, we’re also releasing Cloud DNS Backup. This allows customers to use Network Box’s extensive network of cloud DNS servers to provide backup DNS in the cloud. By using such a cloud based network, service reliability can be improved and DNS queries can be responded to, from the cloud, even if the Internet link to the master DNS server in the LAN/DMZ is down.

As with Cloud Mail Backup, the customer has full control over which Cloud DNS servers in which regions and countries, should be used to provide the service.

At any given time, the current status of Cloud DNS Backup for a particular customer can be checked in ‘Box Office’, by looking at the owner account, ‘Cloud DNS Backup Domains’ section. (This is typically updated once a minute.)

This is a **FREE SERVICE** provided to all Network Box 5 customers subscribing to packages including our [network-dns-server](#) security module.

Over the coming months, we plan to continue to release more of these optional Cloud services. The intent of this work is to offer improved security, functionality, and business continuity, by leveraging cloud technologies, to improve on what we can offer Network Box clients around the world.

**Conditions**

- Clients will have full control over which of their domains will use the service.
- Clients will have full control over which cloud backup servers will be used for their domains.
- In general, the DNS system operates with load-balanced round-robin behaviour. The selection of DNS server to be used to resolve a particular query is often random and unpredictable. It is important to ensure that all listed servers are authoritative and correctly configured for the domains they are serving.
- Only the DNS records themselves, as well as statistical logs, will be stored on the Cloud DNS Backup servers.
- Should a particular Cloud DNS Backup service be unavailable for any reason, it will not respond and the client will choose an alternate server to query (as per the standard mechanics of the DNS protocol).
Network Box 5 Features
January 2015

This month, for Network Box 5, these include:

- Provide an option for the addition of X-Forwarded-* headers to web requests in non-transparent configurations (such as IPv6 ➔ IPv4 translation)
- Enhanced support for a new unified rules engine in several key services - providing improved performance and functionality for policy rule definition and enforcement
- Improvements to information display during firmware updates
- Force rejection of STLS command in POP-3 until STARTTLS support is available (at the moment, POP3S is available, usually on tcp/995)
- Experimental support for POP3 server keepalives during POP3 message scanning
- CVE-2014-8104 for SSL VPN: remote authenticated users denial of service
- CVE-2014-9293: NTP: config_auth insufficient Entropy in PRNG
- CVE-2014-9294: NTP: ntp-keygen use of Cryptographically Weak PRNG
- CVE-2014-9295: NTP: Multiple stack-based buffer overflows
- CVE-2014-9296: NTP: receive function continues to execute after authentication error
- STARTTLS outbound support for SMTP protocol
- Fix to admin portal for correct display of dashboard widgets when there are notification alerts to be shown during login
- Renewal of license key for Kaspersky Anti-Malware, and improved display of license expiry date
- Support for HOST ACL definition and IP address tracking
- Network firewall level support for HOST ACLs (allowing specification of network level firewall rules for dynamic DNS IP A and AAAA records)
- Enhanced support for configurable DPD (dead peer detection) actions in IPSEC VPNs
- Enhanced support for export of SSL proxy CA certificate in DER format
- Introduce a facility to download the SSL proxy CA certificate from the login page of both user and admin web portals (via the green SSL button)
- Additional support for multiple IP subnet ranges in DHCP server configurations
- Enhanced support for use of HTTPS with user portal email links
- Introduction of an optional on-the-box recursive DNS resolver
- Introduction of the network-dns-server security module, providing support for DNS master and slave zones
- Introduction of the Cloud DNS backup service for Network Box 5
- Box Office support for new box icons
- Box Office support for Cloud DNS backup
- Various (mostly internal) enhancements to several internal 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 SOC will contact you to arrange this if necessary.

Should you need any further information on any of the above, please contact your local SOC. They will be arranging deployment and liaison.
Network Box 3 Features
January 2015

On Tuesday, 6th January 2015, Network Box will release our patch Tuesday set of enhancements and fixes. The regional SOCs will be conducting the rollouts of the new functionality in a phased manner over the next 7 days. This month, for Network Box 3, these include:

- CVE-2014-9293: NTP: config_auth insufficient Entropy in PRNG
- CVE-2014-9294: NTP: ntp-keygen use of Cryptographically Weak PRNG
- CVE-2014-9295: NTP: Multiple stack-based buffer overflows
- CVE-2014-9296: NTP: receive function continues to execute after authentication error
- Renewal of license key for Kaspersky Anti-Malware
- Box Office support for new box icons
- Box Office support for Cloud DNS backup
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Network Box IT Pro Corporate Choice Awards 2014

Network Box is delighted to announce that Network Box 3 won, in both the Unified Threat Management and the Managed Security Services categories, at the IT Pro Corporate Choice Awards 2014. In addition, Network Box was awarded the CIO Choice Award 2014 which was voted on by a select panel of Chief Information Officers, from some of the world’s best known and most highly respected organizations.

Network Box Security Trends and Predictions for 2015

Network Box USA CTO, Pierluigi Stella, shared his security forecast for 2015, in Information Security Buzz. To read his predictions, please follow the link below:

Network Box Australasia Formula SAE

Network Box Australasia was one of the sponsors of the ‘Canterbury University’ racing team, which raced against 30 other teams from around the world at the Formula SAE-Australasia, held in Melbourne.

Network Box Year in Focus 2014

To commemorate another landmark year, Network Box has published: Year in Focus 2014. The brochure highlights Network Box achievements over the last twelve months.