DNSBOX200

ULTRA-SECURE, HIGH PERFORMANCE DNS RESOLVER

DNSBOX200 is a DNS slave, recursive resolver (DNS cache) and DHCP server for premium performance and security needs.

This is a flexible appliance, which can be licensed for whichever of these 3 services you need.

For the chosen role(s), it will adapt to give you a high performance fit-for-purpose device:

- An adaptive GUI hides features you do not need
- It integrates smoothly with **DNSBOX300** or **DNSBOX400** to provide a complete solution
- Equally, it can be deployed standalone to carry out a specific role

Additionally, **DNSBOX200** can be used as a master for editing authoritative DNS records.

Its advanced design, with roles and services separated, gives you

- Advanced performance
- Advanced security

You get to follow the best practice approach of deploying separate, isolated services, yet only need to pay for and manage one physical server.

If you have just a few small zones, you can use **DNSBOX200** as a DNS master for editing authoritative DNS records simply by switching its operating mode from slave to master.

When you use the authoritative resolver as a DNS master...

- Isolation from the recursive resolver service means authoritative DNS has another layer of protection, with any possible exposure via more vulnerable DNS caching eliminated
- You have the specialist DNS admin features you need on a slave: granular control and monitoring of your slaved zones; flexible zone transfer options
- Security features include support for DNSSEC signed zones, DNS RPZ Firewall filtering, and secure connections with other DNS servers in your architecture

DNSBOX200 is built on the ApplianSys server appliance platform: its intuitive GUI, smart server management, hardened operating system and sensible hardware design give you security, reliability and ease of use to make your life easier.
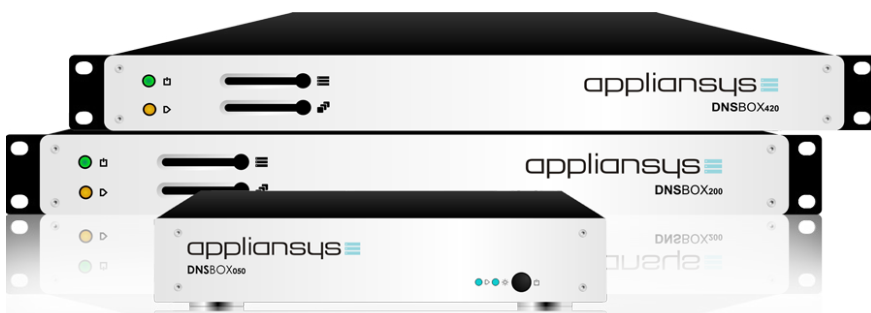
Key Benefits

Specialist DNS admin features

- Ability to display, add, delete, edit, filter and search for zones, as well as view their status
- Real-time and historical graphs on performance of your DNS service
- Easy monitoring of slaved zones
- Support for slave and stub zones
- Automated validation of DNS configuration
- IPv6 support

High Security

- Support for DNSSEC signed zones
- TSIG Keys
- IP-secured connections with other DNS servers Dedicated server: better performance and security
- DNS Firewall protects against malware (RPZ)

Appliance Format

- Dedicated server: better performance and security
- Faster and more secure than a general purpose server
- Easy to configure and use
- High level of resilience and availability
- Slashes cost of ownership, high ROI

Simple to use, web-based DNS administration interface
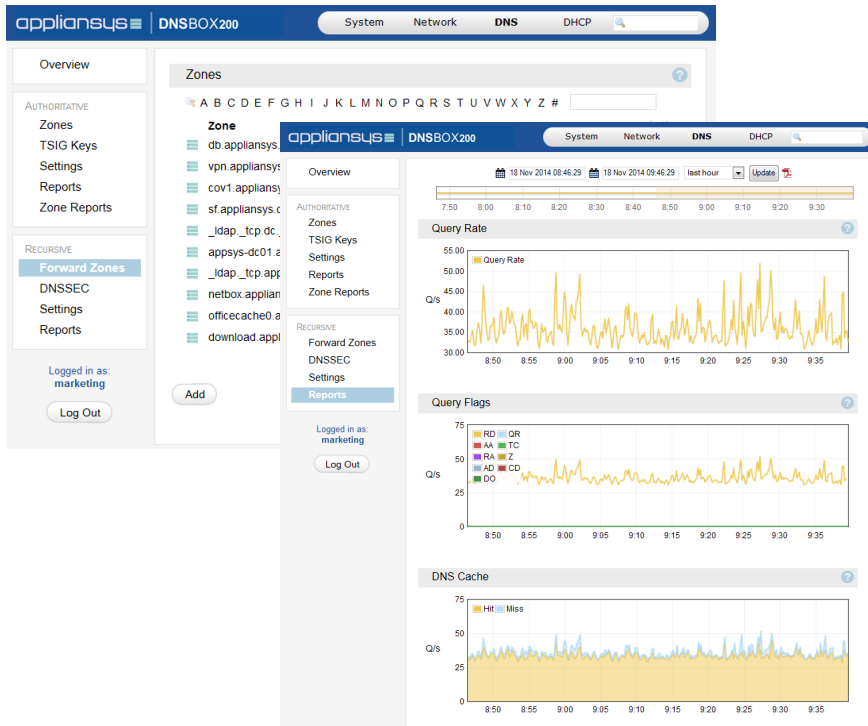
View real time and historical graphs showing queries by number, rate and caching hit-miss ratio; see query flags; monitor service peaks, latency, memory use and unwanted transactions; generate PDF reports; view query logs; add, edit and delete forward zones and DNSSEC Trust Anchors.

Why Unbound

DNSBOX**200** recursive cache uses Unbound - software designed and optimised for recursive resolution. There are a number of features that contribute to the server's security and performance, making it the best tool for the job:

- **High performance** - 2.5x the performance of BIND

  - Many DNS servers, including BIND, have been developed to handle both authoritative and recursive DNS. As a single-purpose server Unbound doesn't suffer from over-complication. Its design is minimalistic and its code simple and lightweight. This increases the server's performance.

  - If you also require authoritative DNS, running a separate server for recursive resolution lets you spread the load. This is particularly important where there are high loads for both authoritative and cached lookups.

  - The DNSSEC validation code was designed integral to Unbound at its inception and optimised for high performance. Many other DNS servers implement DNSSEC as a plug-in or bolt-on, which slows down the speed of resolution.

- **High security**

  - Protection against cache poisoning reduces the threat of a computer hacking attack where traffic is diverted to an incorrect IP address.

  - Recursive resolvers are vulnerable to Denial of Service (DoS) attacks where phony requests overwhelm the IP address with a large volume of traffic. DoS protection gives you peace of mind - the devices or services are always available to users.

  - Information is protected during transmission from the client to the server by using a Secure Sockets Layer (SSL) connection.

  - By running a dedicated DNS caching server you follow the best practice approach of separating the DNS cache from the authoritative server. DNS caches are inherently vulnerable to security risks - separating the services reduces the chance of poisoned DNS lookups stored in the cache finding a route to the authoritative records.

Key Features

Ease of Use

- Plug-and-play
- Configure from any browser, anywhere
- Simple, intuitive interface
- Graphical reports
- Automated SMS and email alerts
- Copy changes between server
- Import/export option for easy backups
- One click upgrade with rollback functionality

Advanced DNS Administration

- Ability to display, filter, add, delete and search for forward zones
- Automatic forward zones creation for local zones
- Real-time and historical graphs showing recursive DNS performance
- Logging recursive queries to local and remote logs
- Unlimited simultaneous administrators
- Extended command line interface (CLI)

Appliance Security & Reliability

- Industrial grade, security-hardened Linux OS with read only, compressed firmware
- 10x more reliable with solid state storage
- Dual CompactFlash cards - program and data
  - Faster boot times
  - Easy swap to replacement hardware
- Integrated firewall
- TSIG secured transfers to 3rd party DNS servers

Expandable Solution

- Ability to add more DNS caches and deploy them in highly available load-balanced (HALB) clusters as your network grows
- Easily upgrade to include other services:
  - Authoritative DNS
  - DHCP
- Seamless integration with **DNS**BOX**300** or **DNS**BOX**400** for a complete solution
- IPv6 support

Technical Specifications

	DNSBOX210	DNSBOX220	DNSBOX230
Resursive Performance (QpS)*	101,000	162,000	192,000
Ethernet (NICs)	2 x 10/100/1000	4 x 10/100/1000	
Flash Storage	1 x OS, 1 x data		
DHCP Storage	SSD		
Dimensions	19" (482.6mm) x 1.75" (44.45mm) x 10" (254mm)	19" (482.6mm) x 1.75" (44.45mm) x 17" (432mm)	

*Peak performance achieved under test conditions. Real life performance limits vary depending on network and traffic characteristics