

# 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 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

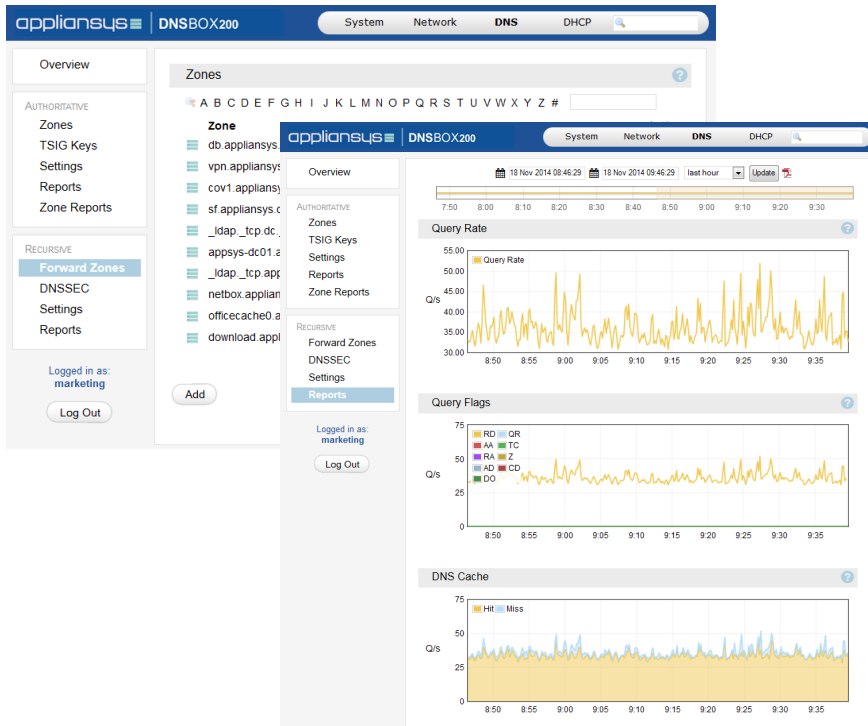
#### High Security

- 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

DNSBOX200 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 **DNSBOX300** or **DNSBOX400** for a complete solution
- IPv6 support

## Technical Specifications

	DNSBOX210	DNSBOX220	DNSBOX230
<b>Recursive Performance (QPS)*</b>	101,000	162,000	192,000
<b>Ethernet (NICs)</b>	2 x 10/100/1000		
<b>Flash Storage</b>	1 x OS, 1 x data		
<b>DHCP Storage</b>	SSD		

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