

DNSBOX₁₀₀

DNS MANAGEMENT MADE SIMPLE

Ultra-secure DNS slave / cache

DNS underpins today's networks. It is business-critical

- Many organisations are utterly dependent on IP-based networks for their core operations. DNS servers are a crucial component of these networks
- DNS appliances are rapidly becoming the preferred solution for reducing the cost of implementation and simplifying DNS management

The recommended DNS architecture is a combination of masters and slaves

- The master, holding the authoritative records sits securely with or without load behind a firewall
- At least two slaves serve queries to users for redundancy

BUT most appliance vendors offer a single master/slave appliance

- With dual use devices, you pay for features a DNS slave doesn't need and will never use
- These vendors don't focus on the management features you want to see in a slave device

Now, the ApplianSys DNSBOX₁₀₀ provides the solution

- Designed from the ground up as a slave, it takes away the headache of monitoring and managing slave zones
- And without the expensive DNS management software needed on a master, it costs about a third of most combined master/slave devices

Network managers win on all counts

- With this purpose built diskless dedicated appliance, you get a better and more reliable slave solution for more robust and secure DNS
- You get slave features you can't get elsewhere - such as HA load-balanced clustering - and yet you save money on your DNS solution

IS YOUR WEB KILLER JUST A FULL STOP AWAY?

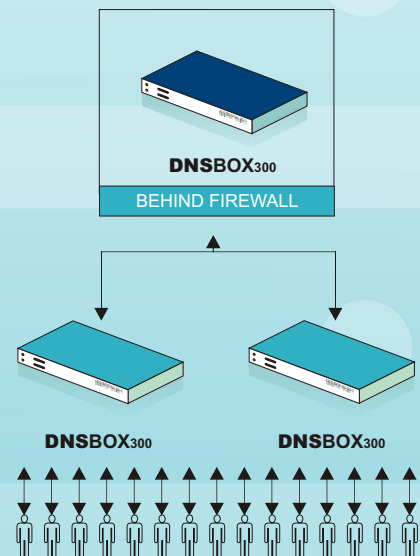


Benefits of the Appliance Format

- **No headaches, no hassle**
 - Plug-and-play, easy to administer
- **Slashes cost of ownership**
 - No installation cost, lower running cost
- **Inherently more secure than a general purpose server**
- **Higher reliability**
- **Better performance**

Dedicated DNS Slave/Cache

- BIND 9.x slave compatible with ApplianSys' DNSBOX₃₀₀, and any DNS server
- Can be used as a recursive resolver (DNS cache)
- Administration interface for simple management of slave zones
- Delete zones, force updates and display zone files
- HA load-balanced clustering
- Uses compact flash for storage, more reliable than hard disks



Recommended architecture for DNS

DNSBOX₁₀₀ - Slave Appliance

Easy Management

DNSBOX₁₀₀ is a dedicated BIND-based slave, which can also act as a recursive resolver (DNS cache), designed to integrate seamlessly with DNSBOX₃₀₀. This is the only dedicated slave appliance available.

DNSBOX₁₀₀ features a web-based DNS administration interface that makes management of slave zones very simple. It allows you to delete zones, force updates and display zone files. It offers support for slave, stub or forward zones, as well as global forwarding options. The GUI allows deep interrogation of the status of the slave, with features such as graphical indicators of zone freshness, querying the on-box cache and SNMP traps. Syslog output can be directed to a remote syslog server. DHCP relay on box is useful in some networks.

Hardware and Reliability

DNSBOX models run entirely from CompactFlash. With no disks in the system, by far the most common point of failure in standard systems is eliminated.

There are two CompactFlash cards used in the system. The first is bootable and contains the operating system (Linux, based on Slackware) and is mounted read-only at all times (other than when being patched). The second contains all settings and DNS data.

Security

The security features included with DNSBOX₁₀₀ are comprehensive. The system operates in a 'sand box' environment. Bind is run chroot in a RAM disk which is mounted read-only. If the server is compromised, the RAM disk can't be damaged; even if it is, a reboot will rebuild it. Additionally, all operating system partitions are mounted read-only, except when being patched.

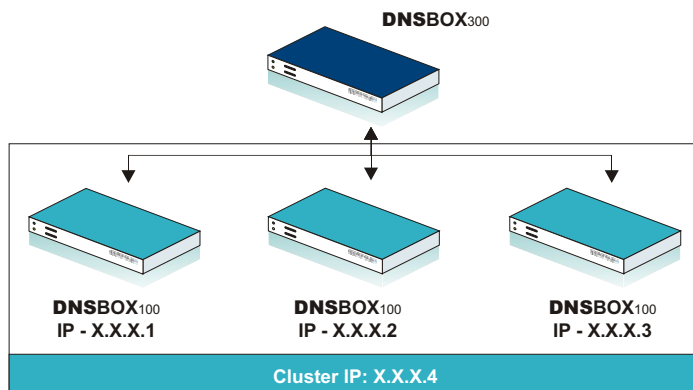
When using DNSBOX₁₀₀ (slave) along side DNSBOX₃₀₀ (master), additional security bonuses are available. A secure VPN tunnel can easily be configured between the units, so all traffic passing between them is encrypted. This ensures that only secure, authenticated masters can update them.

There are some security concerns to be taken into account when running a recursive resolver, usually regarding possible pollution of the cache. We offer configuration of the recursive resolver to permit usage to only certain subnets. You can also configure DNSBOX₁₀₀ to resolve all queries itself, or to refer them to a parent.

HA and load-balanced cluster support for DNSBOX₁₀₀

The DNSBOX₁₀₀ clustering option offers High Availability and load balancing. A cluster of 2 to 254 slaves will respond to requests on a single virtual IP address. Addition or removal of slaves from the cluster results in automatic load balancing between the active boxes.

The cluster provides added redundancy and improved, scalable performance per single DNS server IP address. Should demand grow, additional DNSBOX₁₀₀ appliances can be added to the cluster to improve the service.



DNSBOX₁₀₀ - Key Features

- Secure connection (using IP/Sec with public/private keys) is possible for compatible servers; DNSBOX₁₀₀ will support secure connection to DNSBOX₃₀₀
- Supports high availability and clustering
- Compatible with most standard primary DNS servers
- Secure Web Administration System for both DNS management & appliance management
- Support slave, stub or forward zones
- DHCP relay
- Allows recursive queries
- Allows glue fetches
- SYSLOG capability - supports syslog output to remote syslog server
- Second level of administration (passwords against each zone)
- TSIG support
- Scalable interface suitable for managing a large number of zones

DNSBOX₁₀₀ Technical Specification

| | |
|---------------|---|
| Form Factor: | 1U slim line rack mountable |
| Ethernet: | 1 x 10/100mps LAN port |
| Flash Memory: | 1 x OS/application, 1 x user-data |
| OS: | Linux 2.x kernel |
| Application: | ISC BIND 9.x (most stable/secure available) |
| Support: | Three Tiered Package Options, Email and Online Help |

Note: Technical Specification is subject to change if required. This may be due to availability constraints, or due to a change in architecture. Please ask for details.