



DATASHEET

OX PowerDNS

The backbone of success

DNS servers have advanced beyond a simple way of looking up IP addresses. They have now become a critical business differentiator, for both Network Operators and Telco's alike.

Obviously the faster the DNS response the better the online experience, but DNS servers can also be critical in providing enhanced security and value-added functionality.

More than a DNS server

OX PowerDNS delivers exceptional DNS name resolution, but it also provides enhanced security features too. For example, it can alert users when they, or their machines, make a malware related query and blocks those queries. On top of this it also provides a strong defense against DNS-based Denial of Service (DoS) attacks. These features enable OX PowerDNS to survive in the most hostile of environments, while providing an uninterrupted service.

The solid core of OX PowerDNS

The heart of OX PowerDNS is a highly reliable, proven, low latency DNS engine. This makes OX PowerDNS highly scalable, very efficient and extremely resilient.

Its performance remains responsive even under extreme loads, or during an attack. This means end users get optimal performance at all times.

Good for consumer, good for business

OX PowerDNS is an obvious technical choice, and it is also an extremely attractive business choice too. OX PowerDNS ensures the best end user experience by providing a faster, safer and more secure Internet. From a hardware perspective, due to its small footprint, it is highly efficient and economical. From a service perspective it is very consistent, even when under attack. It can also withstand DoS attacks without the end users noticing.

Simple and easy operations

OX PowerDNS makes provisioning DNS simple and reliable, keeping staff intervention to a minimum. It comes with many features that help operators provide a secure and reliable service. This includes extensive metrics that aid in diagnosing DNS and networking issues. The result is a DNS service that is always running optimally.

End user services

OX PowerDNS provides advanced end user features, such as malware-protection and parental control. These can be branded and sold to end users, giving service providers more opportunities to engage with their end users.

Security, DoS and malware

OX PowerDNS offers double aspect network based security: End users can be alerted when they, or their machines, access known malware sites. The related malware requests can also be blocked. Network administrators can additionally receive reports, or periodically analyze traffic data, to identify potential sources of malware infections.

Finally OX PowerDNS can automatically detect, report and help eliminate DoS attacks within a network, ensuring a continuous and uninterrupted service. In summary, OX PowerDNS saves money, ensures trouble-free operation, and offers a new range of business opportunities.

Visible protection

Parental control

OX PowerDNS Parental control lets providers offer a child-safe Internet to their customers. Parental control comes with an optional, easy-to-use, end user dashboard. This brandable dashboard lets parents choose what content is made available and when.

Infrastructure protection

Intelligent DNS load balancing is key to providing a scalable and resilient DNS service. This is why OX PowerDNS provides Dnsdist. Dnsdist is a load balancer specifically designed for DNS systems.

Apart from load balancing it also:

- Enhances infrastructure security
- Provides superior protection by acting like a firewall
- Guards against known DNS threats such as DoS attacks
- Detects and reports on suspicious traffic

Dnsdist also provides detection, and blocking, of DNS tunneling, detection and shunting of bad domains and per subscriber rate-limiting.

Malware filtering

Malware is one of the biggest problems afflicting the Internet. Unlike endpoint products, OX PowerDNS offers a networkbased protection layer. This means it protects all network devices, including unmaintained old laptops, smart TV's and 'Internet of Things' devices (IoT).

Providers can supply network-based protection to keep infections from reaching their end users. In short,

OX PowerDNS helps providers offer customers a better, and safer, Internet service.

To protect against malware OX PowerDNS utilizes open standards. This allows it to connect to all major threat-list providers. Providers therefore get broader access to the best malware threat intelligence available. Additionally, administrators are provided with network functions that help detect infected users, as well as investigate all malware infections. Follow-up actions vary widely but often include quarantining and isolation.

Reporting and analytics

OX PowerDNS provides both real-time and scheduled reporting. Reports can be business, management or technically oriented. Reports can be automatically generated and mailed to relevant personnel. They can provide details on performance, query rates, metrics on the current situation, comparisons with historical data, server specific quality / volume metrics, details of CPU utilization, peak memory use and other relevant parameters. This gives operational teams a clear overview, and managers a solid foundation for resource management. Data analytics can also be viewed in realtime via dashboards that display statistics and other relevant parameters.

Trusted and proven

PowerDNS forms the backbone of the Internet. Founded in 1999 PowerDNS now provisions over 30% of all domains on the Internet (75% of all DNSSEC domains). More than 150K instances of PowerDNS are deployed globally today.

OX PowerDNS offers:

Dnsdist – dedicated load balancer

Specifically designed for DNS servers it provides smart load-balancing, horizontal scaling, rate limiting, multi-gigabit filtering and more.

Scheduled reporting engine

Schedule technical and business reports that can be emailed on a regular basis.

Real-time dashboard

Provides technical information about your system as it happens.

Malware detection and response

Detects malware infected users and can trigger automated responses.

End user protection

Offers end users malware protection features. Protects all devices on the network, including IoT devices.

Parental control

Lets providers offer their end users parental control features.

Outstanding performance

Provide better customer experience through low latency delivery of DNS requests and high resilience against malicious traffic and attacks.

DoS detection

Timeout generation, Servfail generation, NXDOMAIN overloading, random subdomain attacks, Botnets and more.

Open malware platform

Supports Threat Stop, Vada Secure, Zvelo, Far Sight, Webroot, Spamhaus and more.

Authoritative server

Also available is a business grade Authoritative Server for hosting DNS records. Contact Open-Xchange for more details.

OX PowerDNS for Internet Service Providers

