

PowerDNS DNSdist

for superior performance with DNS load balancing



Protects and optimizes DNS traffic

DNSdist is a unique DNS proxy and load balancer that brings out the best possible performance in any DNS deployment.

It optimizes DNS traffic in front of the PowerDNS Recursor, and both are normally deployed together to provide an unrivaled feature set for DNS service. DNSdist also delivers low latency DNS responses with any legacy DNS servers on the network. Provide your subscribers with optimized delivery while adding an additional layer of security through DNS encryption and protection against DDoS and abusive traffic.



A **unique DNS-aware load balancer** for DNS traffic that goes in front of recursive or authoritative servers



Protection against malicious and abusive traffic such as DDoS attacks, DNS tunneling and exfiltration



Supports DoT, DoH, DoQ and DoH3 to **allow incoming encrypted traffic** from a DNS client



Flexible Lua policy engine **simplifies customization** to meet individual and local needs



Superb monitoring capabilities, including Prometheus support



Works seamlessly with PowerDNS Recursor, but can also be used in front of legacy DNS recursive servers



Supports hassle-free DNS migrations and mixed setups

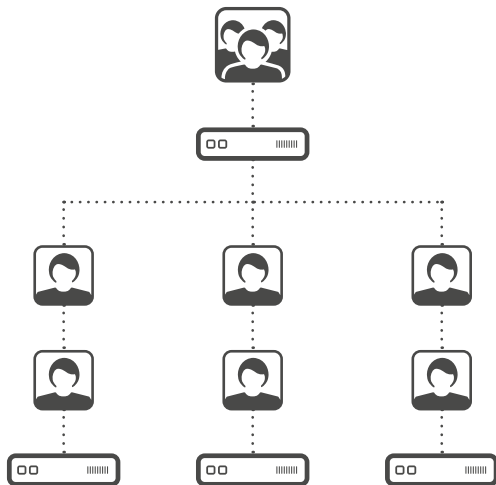


Comes with consulting, implementation assistance, customization, and ongoing maintenance support

A rapid, secure internet experience

Providing top performance

DNSdist protects and filters subscribers' DNS traffic and acts as a load balancer in front of recursive servers. It is a highly DNS-, DoS-, and abuse-aware load balancer which routes requests to the best available server. DNSdist optimizes DNS traffic for hundreds of millions of internet subscribers and provides top performance.



Privacy with DNS Encryption

DNSdist supports incoming DNS over TLS (DoT), DNS over HTTPS (DoH), DNS over QUIC (DoQ) and DNS over HTTP/3 (DoH3) connections, so traffic is encrypted as it travels from the client to DNSdist. This lets network operators offer additional privacy to subscribers and protects against data interception. An encrypted DNS resolver is a vital component of competitive DNS services and can prevent DNS from moving to "Over the Top DNS providers." DNSdist provides an encrypted DNS service directly on the network closest to users for the lowest latency rates possible and lets network operators control subscribers' DNS traffic.

Protect against DDoS and abuse

DNSdist is optimized to protect against malicious and abusive traffic. A flexible policy engine allows administrators to build new rules and filters to suit the characteristics of local traffic. This adaptable engine, combined with the ability to limit the rate of incoming requests per IP address/CIDR, provides comprehensive protection against DDoS attacks. DNSdist also detects and blocks DNS tunneling and exfiltration, which prevents misuse of the DNS service as a communication channel. Our reporting interface provides query statistics, hit rates, and status notifications so you can monitor performance and security.

Fully compatible with PowerDNS or legacy DNS

DNSdist is an ideal solution when used in front of the PowerDNS Recursor. However, DNSdist also protects DNS traffic and acts as a load balancer for legacy DNS recursive servers.

This flexibility gives you a simple way to add the essential DNS encryption standards DoH and DoT to your legacy DNS setup. Regardless of your deployment, PowerDNS experts are available to assist with support and services whenever you need them.

