DNS Server

A Datasheet by FusionLayer Inc.

Secure and Scalable DNS Server for Your Network

FusionLayer DNS is a virtualizable DNS software appliance streamlining the operational routines associated with running a DNS service. With an automated software update process and support for centralized management via FusionLayer's IPAM, it slashes the Operating Expenses (OPEX) associated with traditional DNS server products.
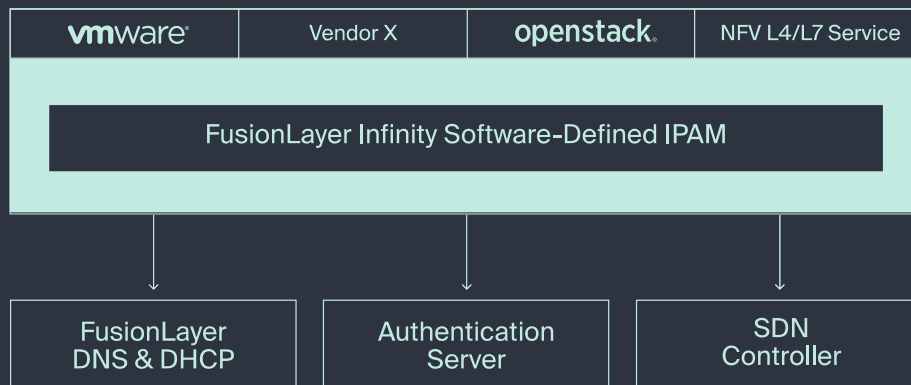
Social media, peer-to-peer networks, and IP-everywhere are having a significant impact on the number of DNS queries. This trend is expected to gain further momentum over the coming years, requiring DNS platforms that can be easily scaled up to cope with increasing loads. At the same time, disaster recovery processes in virtualized computing environments rely on DNS, making it perhaps the single most critical network service today. Unlike traditional hardware-based computing appliances, FusionLayer DNS introduces a new level of platform independence and provides an easily manageable, secure, and scalable DNS solution for your network.

Features:

- GUI-based user-friendly management tools reducing OPEX

- Automated validation of DNS configuration

- Functions as an authoritative DNS server

- Functions as a recursive DNS server with Access Control

- Functions as DNS forwarder with Access Control

- Support for IPv4 and IPv6

- Support for DNSSEC (NSEC, NSEC3)

- Support for dynamic DNS

- Support for TSIG-secured transactions, NOTIFY, IXFR/AXFR

- Monitoring utility for DNS performance

- Monitoring utility for DNS analytics

- o   Rate-limiter restricting the amount of DNS traffic from individual IPs

- o   IPS blocking IP addresses generating abnormal traffic

- o   Support for centralized management via IPAM

- o   Scales up to 100,000 queries-per-second on a suitable platform

- o   Distributed as software appliance with hardened Linux OS

- o   Automated software update and patch management process

- o   Supports any RHEL-compliant native or virtual x86-based platform

- o   Certified as VMware and Citrix Ready

vmware®	Vendor X	**openstack.**	NFV L4/L7 Service
FusionLayer Infinity Software-Defined IPAM			

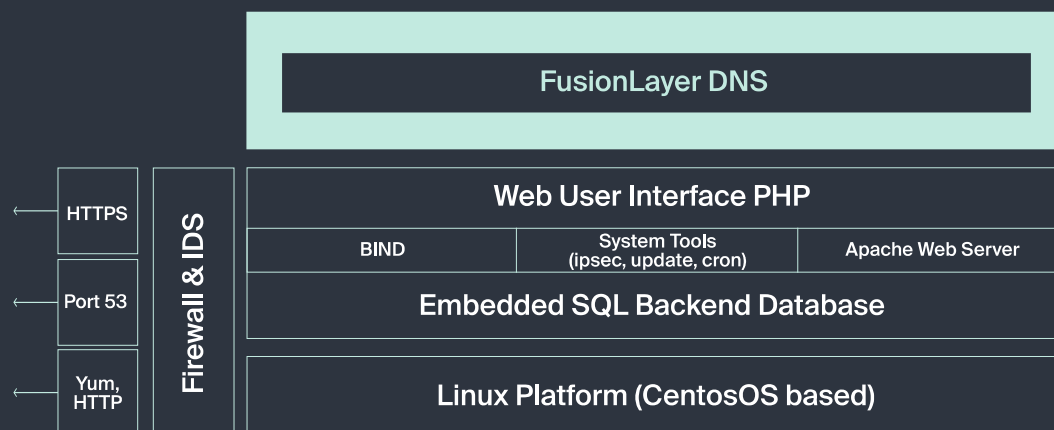| FusionLayer DNS & DHCP	Authentication Server	SDN Controller

End-to-End FusionLayer DDI Solution with FusionLayer Software-Defined IPAM, DNS and DHCP

Key Benefits:

o Jump-start optimized and secure DNS servers in just minutes

o Slash OPEX through automated software updates and centralized management

o Manage DNS service locally via user-friendly GUI or centrally from IPAM

o Deploy high-performance DNS platform at a reasonable cost

o Monitor DNS performance and analytics

o Support emerging networking standards (IPv6, DNSSEC)

o Run DNS servers on native and/or virtual x86 platforms

o The ideal solution for cloud computing initiatives with virtualized DNS service

FusionLayer DNS		

|		Web User Interface PHP		
HTTPS	Firewall & IDS	BIND	System Tools (ipsec, update, cron)	Apache Web Server
Port 53		Embedded SQL Backend Database		
Yum, HTTP		Linux Platform (CentosOS based)		

Simplified Management

- Simplify the DNS server management process with:

    - User-friendly GUI designed for system management

    - Tools and validation for advanced DNS configurations

    - Automated log rotation

    - Built-in support for syslog forwarding

    - Easy backup process managed via GUI

    - Automated software updates

- Real-time reports on most active hosts and queried PR types

- Integrate DNS with central IPAM to

    - Centralize the management of zone files

    - Automate the creation of slave zones

    - Verify that incremental zone serial numbers on

    - secondary servers are up to date

    - Centralized DNS status monitoring and process control

    - View collected DNS analytics centrally

    - Monitor DNS performance in real-time

Edit Zones
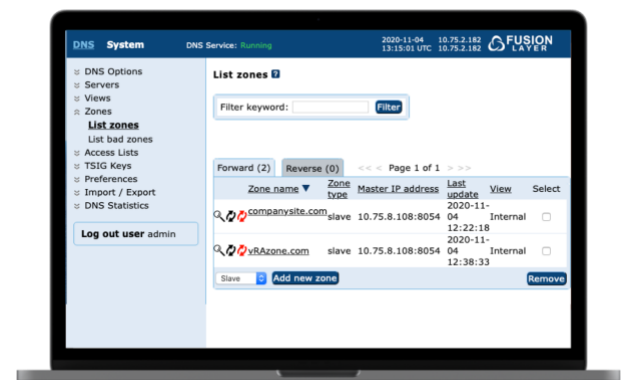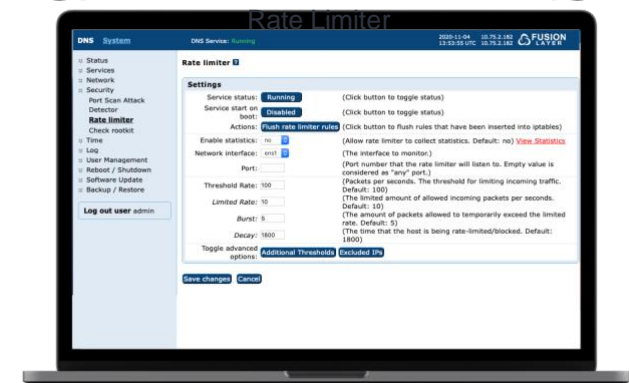
List Zones

Increased Security

- o Built-in support for SSL & user authentication

- o Signatures and encrypted API connections with IPAM

- o Hardened server design optimized for DNS

- o ACLs for restricting queries to authorized networks

- o Built-in IPS blocking abnormal network traffic

- o Rate-limiter restricting individual IP address DNS traffic

High Availability (HA) & Scalability

- Simple backup facilitates quick disaster recovery

- Embedded SQL backend for high performance

- Scales to (100,000+ queries per second) on native x86 hardware

- Deploy as a highly available virtual machine in VMware or Citrix

- Monitor DNS performance centrally from IPAM

- Monitor DNS analytics centrally from IPAM

Supporting Datasheets

https://fusionlayer.com/documents/software-defined-ipam-datasheet.pdf

https://fusionlayer.com/documents/dns-server-datasheet.pdf