A mission critical version of the well known OPNsense firewall

Offering specific business-oriented features and third party security verification. Currently, the only open source LINCE compliant firewall.
OPNsense® Business Edition

✓ Mission critical
✓ LINCE compliant  (security verification by trained third party independent professionals)
✓ Commercial firmware repository
✓ Free GeoIP database
✓ Official OPNsense Open Virtualisation Image
✓ Central Management Application
✓ Web Application Firewall
✓ Advanced Web Proxy  (includes fine grained controls and policies)
✓ Free E-Book (English & German)

“The Business Edition offers additional safeguards where functional changes are being included in a more conservative manner and feedback has been collected from development and community.”

Ad Schellevis - Project Leader
OPNcentral offers a convenient way to manage all your Business Edition Firewalls.

- Manage remote hosts using a secure connection and API secrets
- Machine firmware status & upgrade
- Machine service status and control
- Machine resource status
- Access remote hosts with one click on a simple GUI link
- Provisioning / sharing settings
- Multi Tenancy support using host groups

**Firmware Status Example**

- **CPU usage**: 8.72%
- **Memory usage**: 26.02%
- **Swap usage**: 46.79%

**Resource Monitor Example**

- **State usage**: 0.70%
- **Alias usage**: 0.70%
- **Source tracking**: 0.00%
The Web Application Firewall plugin offers some functionality which can also be found in community plugins available, but in a more user friendly manor. It combines the features most commonly used in reverse proxies, such as TLS offloading and load balancing.

To ease maintenance the OPNWAF plugin offers usage of both internal certificates or newly generated using the ACME protocol via Let’s Encrypt with a single click.

OPNWAF, easily protect web services against all sorts of injection attacks and provides encryption for traffic to and from the outside world.

- TLS offloading
- Load balancing
- OWASP ModSecurity ruleset
- Easy setup of Virtual servers/hosts
- Internal or newly generated certificates
- Single click Lets’s Encrypt integration
**SOFTWARE FEATURE OVERVIEW**

Stateful firewall
- Filter by
  - Source
  - Destination
  - Protocol
  - Port
- OS (OSPF)
- Limit simultaneous connections on a per rule base
- Log matching traffic on a per rule bases
- Policy Based Routing
- Packet Normalisation
- Option to disable filter for pure router mode

Policy organisation
- Alias Support
  - IP addresses
  - Port ranges
  - Domain names (FQDN)
- Interface Groups
  - Create security zones with equal rules
- Rule Category
  - Easy access rule sets

Granular control state table
- Adjustable state table size
- On a per rule bases
- Limit simultaneous client connection
- Limit states per host
- Limit new connections per second
- Define state timeout
- Define state type

State types
- Keep
- Sloppy
- Modulate
- Symproxy
- None

Optimisation options
- Normal
- High latency
- Aggressive
- Conservative

Authentication
- External Servers
- LDAP
- Radius
- Integrated Servers
  - Local User Manager
  - Vouchers / Tickets
  - FreeRadius (Plugin)

Authorization
- User Interface
  - Local User Manager

Accounting
- FreeRadius (Plugin & External)
- Vouchers / Tickets

2-Factor Authentication
- Supports OTP
- Google Authenticator

Supported services:
- Captive Portal
- Proxy
- VPN
- GUI
- SSH / Console

Certificates
- Certificate Authority
  - Create or Import CA's
  - Create or Import Certificates
- Let's Encrypt (Plugin)
  - Automated (Trusted) CA
- 802.1Q VLAN support
- max 4096 VLAN's

Link Aggregation & Failover
- Failover
- Load Balance
- Round Robin
- Cisco Ether Channel (FEC)
- 802.3ad LACP

Other Interface types
- Bridged interfaces
- Generic Tunnel Interface (GIF)
- Generic Routing Encapsulation

Network Address Translation
- Port forwarding
  - 1:1 of ip's & subnets
  - Outbound NAT
  - NAT Reflection

Traffic Shaping
- Limit bandwidth
- Share bandwidth
- Prioritise traffic
- Rule based matching
  - Protocol
  - Source
  - Destination
  - Port
  - Direction

IGMP Proxy
- For multicast routing

Universal Plug & Play
- Fully supported

Dynamic DNS
- Selectable form a list
- Custom
- RFC 2136 support

DNS Forwarder
- Host Overrides
- Domain Overrides

DNS Server
- Host Overrides
  - A records
  - MX records
  - Access Lists

DNS Filter
- Supports OpenDNS

DHCP Server
- IPv4 & IPv6
- Relay Support
- BOOTP options

Multi WAN
- Load balancing
- Failover
- Aliases

Load Balancer
- Balance incoming traffic over multiple servers

Network Time Server
- Hardware devices
  - GPS
  - Pulse Per Second

Intrusion Detection & Prevention
- Inline Prevention
- Integrated rule sets
  - SSL Blacklists
  - Feodo Tracker

- Emerging Threats ETOpen
- SSL Fingerprinting
- Auto rule update using configurable cron

Captive Portal
- Typical Applications
  - Guest Network
  - Bring Your Own Device (BYOD)
  - Hotel & Camping Wifi Access
  - Template Management
  - Multiple Zones

Authenticators
- All available authenticators
- None (Splash Screen Only)

Voucher Manager
- Multiple Voucher Databases
- Export vouchers to CSV
- Timeouts & Welcome Back

Bandwidth Management
- Use Traffic Shaper

Portal bypass
- MAC and IP whitelisting

Real Time Reporting
- Live top IP bandwidth usage
- Active Sessions
- Time left
- Rest API

Virtual Private Networks
- IPsec
  - Site to Site
  - Road Warrior

WireGuard (Plugin)
- Site to Site
- Road Warrior

OpenVPN
- Site to Site
- Road Warrior

Easy client configuration exporter

Tinc (Plugin)
- Full mesh routing
- ZeroTier (Plugin)

VPN, SDN & SD-WAN

High Availability
- Automatic hardware failover
- Synchronised state table
- Configuration synchronisation

Caching Proxy
- Multi interface
- Transparent Mode
- Support SSL Bump
- SSL Domain only (easy filtering)

Access Control Lists
- Blacklists
- Category Based Web-filter
- Traffic Management

Auto sync for remote blacklists
- ICAP (supports virus scan engine)

Virus scanning (via plugins)
- External engine support (ICAP)
- clamAV (Plugin / C-ICAP)

Reverse Proxy
- HAPProxy - Load balancer (Plugin)

Online Identity Protection
- Tor - Anonymity online (Plugin)

Backup & Restore
- History & Diff support
- File Backup
- Cloud Backup
- Git Backup

SNMP
- Monitor & Traps
- Diagnostics
- Filter reload status
- Firewall Info (pfInfo)
- Top Users (pfTop)
- Firewall Tables
- Aliases
- Bogons
- Current Open Sockets
- Show All States
- State Reset
- State Summary
- Wake on LAN
- ARP Table
- DNS Lookup
- NDP Table
- Ping
- Packet Capture
- Test Port

Monitoring
- Zabbix Agent (Plugin)
- Monit (Plugin)
- Proactive System Monitoring

Enhanced Reporting
- Network Flow Analyser 'Insight'
  - Fully Integrated
  - Detailed Aggregation
  - Graphical Representation
  - Clickable and Searchable
  - CSV Exporter

System Health
- Round Robin Data
- Selection & Zoom
- Exportable

Traffic Graph
- Live Traffic Monitoring

Network Monitoring
- Netflow Exporter
  - Version 5 & version 9
  - Local for 'Insight'

Firmware
- Support Virtual Installs
  - VMware tools (Plugin)
- Xen Guest Utilities (Plugin)

Easy Upgrade
- Reboot warning for base upgrades

SSL Flavour selectable
- OpenSSL
- LibreSSL

Selectable Package Mirror
- Reinstall Single Package
- Lock Package (prevents upgrade)

Audit Feature
- Check installed packages for known security vulnerabilities

Plugin Support
- REST API
- ACL support

Online Documentation
- Free & Searchable

Securing Networks™