



Technical Overview of the Zenarmor Dashboard

From Installation to more advanced features

**THOMAS
KRENN®**

Installing the Zenarmor Repository

The screenshot shows the OPNsense web interface. On the left is a sidebar menu with categories like Lobby, Reporting, System, Gateways, High Availability, Settings, Trust, Wizard, Log Files, Diagnostics, Interfaces, Firewall, VPN, Services, Power, and Help. The main content area displays a table of installed and available packages. The package 'os-sunnyvalley' is highlighted with an orange border. The table columns include package name, version, size, number of packages, provider, and description.

Package Name	Version	Size	Count	Provider	Description	Info	Plus
os-rspamd	1.12_1	75.3KiB	3	OPNsense	Protect your network from spam	ⓘ	+
os-shadowsocks	1.0_2	32.2KiB	3	OPNsense	Secure socks5 proxy	ⓘ	+
os-siproxd	1.3_2	67.4KiB	3	OPNsense	Siproxd is a proxy daemon for the SIP protocol	ⓘ	+
os-smart	2.2_1	22.0KiB	3	OPNsense	SMART tools	ⓘ	+
os-sslh	1.0_1	30.7KiB	3	OPNsense	sslh configuration front-end	ⓘ	+
os-stunnel	1.0.5_2	44.7KiB	2	OPNsense	Stunnel TLS proxy	ⓘ	+
os-sunnyvalley	1.2_3	643B	3	OPNsense	Vendor Repository for Zenarmor (a.k.a Sensei, Next Generation Firewall Extensions)	ⓘ	+
os-tayga	1.2_2	19.0KiB	3	OPNsense	Tayga NAT64	ⓘ	+
os-telegraf	1.12.7	87.1KiB	3	OPNsense	Agent for collecting metrics and data	ⓘ	+
os-tftp	1.0	12.9KiB	3	OPNsense	TFTP server	ⓘ	+
os-theme-cicada	1.34	5.27MiB	3	OPNsense	The cicada theme - dark grey onyx	ⓘ	+
os-theme-rebellion	1.8.8	5.20MiB	3	OPNsense	A suitably dark theme	ⓘ	+
os-theme-tukan	1.27	5.26MiB	3	OPNsense	The tukan theme - blue/white	ⓘ	+
os-theme-vicuna	1.45	5.27MiB	3	OPNsense	The vicuna theme - blue sapphire	ⓘ	+
os-tinc	1.6_4	57.3KiB	2	OPNsense	Tinc VPN	ⓘ	+
os-tor	1.9	103KiB	3	OPNsense	The Onion Router	ⓘ	+
os-udpbroadcastrelay	1.0_3	44.7KiB	3	OPNsense	Control udpbroadcastrelay processes	ⓘ	+
os-upnp	1.5_3	33.9KiB	3	OPNsense	Universal Plug and Play Service	ⓘ	+
os-virtualbox	1.0_1	516B	3	OPNsense	VirtualBox guest additions	ⓘ	+
os-vmware	1.5_1	601B	2	OPNsense	VMware tools	ⓘ	+
os-vnstat	1.3_1	22.1KiB	3	OPNsense	Network traffic monitor	ⓘ	+
os-web-proxy-sso	2.2_2	38.5KiB	3	OPNsense	Kerberos authentication module	ⓘ	+
os-wireguard	1.13_5	55.5KiB	3	OPNsense	WireGuard VPN service	ⓘ	+
os-wireguard-go	1.13_5	55.5KiB	2	OPNsense	WireGuard VPN service	ⓘ	+

OPNsense (c) 2014-2023 Deciso B.V.

Zenarmor Plugin Installation

The screenshot shows the OPNsense web interface. The top navigation bar includes the OPNsense logo, a search bar, and the user 'root@OPNsense.localdomain'. The left sidebar contains a menu with categories like Lobby, Reporting, System, Access, Configuration, Firmware, Status, Settings, Changelog, Updates, Plugins, Packages, Reporter, Log File, Gateways, High Availability, Routes, Settings, Trust, Wizard, Log Files, Diagnostics, Interfaces, Firewall, VPN, Services, Power, and Help. The main content area displays a table of installed and available plugins. The 'os-sensei' plugin is highlighted with an orange border.

Plugin Name	Version	Size	Architecture	Author	Description	Actions
os-nut	1.8.1_2	40.8KiB	3	OPNsense	Network UPS Tools	ⓘ +
os-openconnect	1.4.4	25.8KiB	3	OPNsense	OpenConnect Client	ⓘ +
os-postfix	1.23_3	157KiB	3	OPNsense	SMTP mail relay	ⓘ +
os-puppet-agent	1.1	21.3KiB	3	OPNsense	Manage Puppet Agent	ⓘ +
os-qemu-guest-agent	1.2	19.0KiB	3	OPNsense	QEMU Guest Agent for OPNsense	ⓘ +
os-radsecproxy	1.0_1	103KiB	3	OPNsense	RADIUS proxy provides both RADIUS UDP and TCP/TLS (RadSec) transport	ⓘ +
os-realtek-re	1.0	361B	3	OPNsense	Realtek re(4) vendor driver	ⓘ +
os-redis	1.1_2	68.4KiB	3	OPNsense	Redis DB	ⓘ +
os-relayd	2.7	142KiB	2	OPNsense	Relayd Load Balancer	ⓘ +
os-rfc2136	1.8	39.6KiB	3	OPNsense	RFC-2136 Support	ⓘ +
os-rspamd	1.12_1	75.3KiB	3	OPNsense	Protect your network from spam	ⓘ +
os-sensei	1.15.2	227MiB	N/A	SunnyValley	Next Generation Firewall Extensions for OPNsense (ZENARMOR)	ⓘ +
os-sensei-agent	1.15.2	114MiB	N/A	SunnyValley	ZENARMOR (Sensei) Connectivity Agent for Cloud Central Management	ⓘ +
os-sensei-updater	1.15	4.99KiB	N/A	SunnyValley	OPNsense ZENARMOR Plugin Updater	ⓘ +
os-shadowsocks	1.0_2	32.2KiB	3	OPNsense	Secure socks5 proxy	ⓘ +
os-siproxd	1.3_2	67.4KiB	3	OPNsense	Siproxd is a proxy daemon for the SIP protocol	ⓘ +
os-smart	2.2_1	22.0KiB	3	OPNsense	SMART tools	ⓘ +
os-sslh	1.0_1	30.7KiB	3	OPNsense	ssh configuration front-end	ⓘ +
os-stunnel	1.0.5_2	44.7KiB	2	OPNsense	Stunnel TLS proxy	ⓘ +
os-tayga	1.2_2	19.0KiB	3	OPNsense	Tayga NAT64	ⓘ +
os-telegraf	1.12.7	87.1KiB	3	OPNsense	Agent for collecting metrics and data	ⓘ +
os-tftp	1.0	12.9KiB	3	OPNsense	TFTP server	ⓘ +
os-theme-cicada	1.34	5.27MiB	3	OPNsense	The cicada theme - dark grey onyx	ⓘ +
os-theme-rebellion	1.8.8	5.20MiB	3	OPNsense	A suitably dark theme	ⓘ +

OPNsense (c) 2014-2023 Deciso B.V.

Zenarmor Plugins Successfully Installed

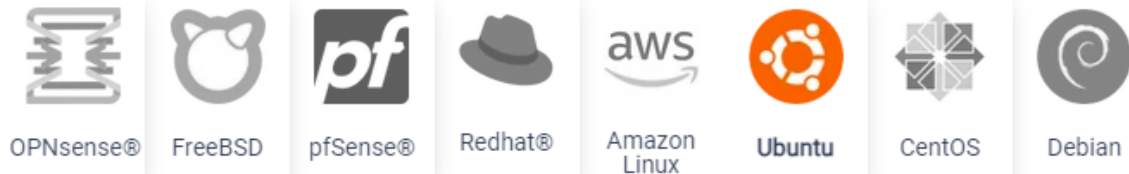
- Lobby
- Reporting
- System
 - Access
 - Configuration
 - Firmware
 - Status
 - Settings
 - Changelog
 - Updates
 - Plugins
 - Packages
- Reporter
- Log File
- Gateways
- High Availability
- Routes
- Settings
- Trust
- Wizard
- Log Files
- Diagnostics
- Interfaces
- Firewall
- VPN
- Services
- Power
- Help

System: Firmware

- Status
- Settings
- Changelog
- Updates
- Plugins
- Packages

Name	Version	Size	Tier	Repository	Comment	
os-sensei (installed)	1.15.2	227MiB	N/A	SunnyValley	Next Generation Firewall Extensions for OPNsense (ZENARMOR)	
os-sensei-agent (installed)	1.15.2	114MiB	N/A	SunnyValley	ZENARMOR (Sensei) Connectivity Agent for Cloud Central Management	
os-sensei-updater (installed)	1.15	4.99KiB	N/A	SunnyValley	OPNsense ZENARMOR Plugin Updater	
os-sunnyvalley (installed)	1.2_3	643B	3	OPNsense	Vendor Repository for Zenarmor (a.k.a Sensei, Next Generation Firewall Extensions)	
os-virtualbox (installed)	1.0_1	516B	3	OPNsense	VirtualBox guest additions	
os-acme-client	3.17	714KiB	3	OPNsense	ACME Client	
os-apcupsd	1.1	56.6KiB	3	OPNsense	APCUPSD - APC UPS daemon	
os-api-backup	1.1	3.80KiB	3	OPNsense	Provide the functionality to download the config.xml	
os-bind	1.26_5	145KiB	3	OPNsense	BIND domain name service	
os-c-icap	1.7_3	50.1KiB	3	OPNsense	c-icap connects the web proxy with a virus scanner	
os-cache	1.0_1	520B	3	OPNsense	Webserver cache	
os-chrony	1.5_1	20.4KiB	3	OPNsense	Chrony time synchronisation	
os-clamav	1.8	47.7KiB	3	OPNsense	Antivirus engine for detecting malicious threats	
os-collectd	1.4_1	36.8KiB	3	OPNsense	Collect system and application performance metrics periodically	
os-crowdsec	1.0.6	63.7KiB	3	OPNsense	Lightweight and collaborative security engine	
os-ddclient	1.13_2	97.6KiB	3	OPNsense	Dynamic DNS client	
os-debug	1.5	434B	2	OPNsense	Debugging Tools	
os-dmidecode	1.1_1	2.82KiB	3	OPNsense	Display hardware information on the dashboard	
os-dnscrypt-proxy	1.13_1	85.2KiB	3	OPNsense	Flexible DNS proxy supporting DNSCrypt and DoH	

Zenarmor Support for Other OS



Supported Ubuntu releases: 18.04 through 22.04

- 1 Run the one-liner to install the package

```
$ curl https://updates.sunnyvalley.io/getzenarmor | sudo sh
```
- 2 Register an account in [Zenconsole Cloud Portal](#)
- 3 Connect and start managing through Zenconsole

```
# zenarmorctl cloud register
```

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Zenarmor can also be run on multiple Linux/Unix based OS, other than OPNsense, and supports Layer 2 bridge mode for Secure Web Gateway (SWG) deployments in the cloud or on-prem.

Initial Configuration Wizard – STEP 1

OPNsense <

Zenarmor Subscription: Free root@OPNsense.localdomain

1 Welcome 2 Database Settings 3 Interface Settings 4 Subscription 5 Finish

zenarmor

You're ready to do the initial configuration.

Check here to indicate that you have read and agree to the [Terms of Service](#) and [Privacy Policy](#).

Uninstall I Agree

Accept the terms and click Agree

Want more power?
Zenconsole is the cloud central manager for Zenarmor.
[Connect to Zenconsole](#)

Have feedback?
We'd love to hear your feedback on Zenarmor.
[Send Feedback](#)

Initial Configuration Wizard – STEP 2

OPNsense

Zenarmor Subscription: Free root@OPNsense.localdomain

1 Welcome 2 Database Settings 3 Interface Settings 4 Subscription 5 Finish

- Install a local Elasticsearch Database
- Install a local MongoDB Database
- Use a Remote Elasticsearch Database
- Use a local SQLite Database (Support up to 100 devices)

CPU Model: Intel(R) Core(TM) i7-10870H CPU @ 2.20GHz
CPU Score: 723820
Physical Memory Size: 12.5 GB

Previous Install Database

1.

2.

Select the database of your choice and install

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Initial Configuration Wizard – STEP 3

Zenarmor Subscription: Free root@OPNsense.localdomain

1 Welcome 2 Database Settings 3 Interface Settings 4 Subscription 5 Finish

Deployment mode
Routed Mode (L3 Mode, Reporting + Blocking) with emulated netmap driver

Do not pin engine packet processors to dedicated CPU cores

Please choose interfaces to protect

em1 lan

1.

2.

First, Select your deployment mode, then apply protection on the interface and set the security zone.

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Initial Configuration Wizard – STEP 4

Zenarmor Subscription: Free root@OPNsense.localdomain

1 Welcome 2 Database Settings 3 Interface Settings 4 Subscription 5 Finish

Let's make the most of your Zenarmor!
Start a 15-day Free Trial of Business Subscription to experience zenarmor with all of its benefits!
Or, if you have already purchased a subscription, enter the activation key to start protecting your network!
[Compare Plans & Pricing](#)

Get me a 15-day Free Trial of Business Subscription(*)
 I already have my subscription key
 Get me the Free Edition

Advanced Security, Unlimited Policies & Cloud Management, Active Directory Integration and many more...
Enter a valid email address to claim your activation key
Email Address
Email address

Previous **Next**

1. 2.

First, Select your subscription type, then click Next

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Initial Configuration Wizard – STEP 5

OPNsense

Zenarmor Subscription: Free root@OPNsense.localdomain

Lobby Reporting System Interfaces Firewall VPN Services Zenarmor Dashboard Reports Live Sessions Policies Settings Notifications Power Help

1 Welcome 2 Database Settings 3 Interface Settings 4 Subscription 5 Finish

Almost done.

Your installation of zenarmor is almost complete.
Click 'Complete' to write the final configuration to disk and start zenarmor

Previous Complete

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The Installation is completed In less than 5 minutes

Exploring the Dashboard – Main overview

OPNsense Zenarmor Subscription: Business root@OPNsense.localdomain

Today, **zenarmor** detected **304** and blocked **296** potentially harmful activities according to your rules.

Traffic Graph (Throughput)

Download: 7.6 Mb, 5.7 Mb, 3.8 Mb, 1.9 Mb, 0 b

Upload: 273.4 Kb, 205.1 Kb, 138.7 Kb, 68.4 Kb, 0 b

Top Threats

99%

Top Hosts

40%, 60%

Top Apps

60%, 18%, 11%, 6%, 5%

System Status

Component	Status	Version	Start on boot
Engine	Running	1.15.2 - Oct 25, 2023 12:45 PM	On
Reporting Database	Running	Type: mongodb	On
Cloud Agent	Running	1.15.2 - Oct 25, 2023 12:37 PM	On

Resource Utilization

Resource	Usage	Load
CPU Utilization	0%	1.87 1.42 1.09
Disk Space Utilization	0.07%	Mount: /usr/local/zenarmor/output/active/
Memory Utilization	37%	Used: 4.4 GB, Total: 11.9 GB

Cloud Nodes Status

Region	Status	Percentage
Europe2	UP	100%
Europe	UP	100%

Want more power? Zenconsole is the cloud central manager for Zenarmor. [Connect to Zenconsole](#)

Have feedback? We'd love to hear your feedback on Zenarmor. [Send Feedback](#)

Reporting Dashboard – 60+ Visual Reports

OPNsense Zenarmor Subscription: Business root@OPNsense.localdomain

Connections Threats Blocks Web DNS TLS

Filter Volume Last 6 hours 30m Top 10 Download

App Categories Breakdown

Software Updates	45.7%
Media Streaming	18.5%
Secure Web Browsing	15%
News	10.2%
Infrastructure Services	7.5%
Social Network	1.3%
Web Browsing	0.6%
Search	0.5%
Online Utility	0.4%
Database	0.2%

Apps Breakdown

Microsoft Updates	46.5%
Secure Web Browsing	15%
Youtube	11.4%
Reddit	10.1%
Akamai	6.9%
Quic UDP Connection	6.7%
Vimeo	1.3%
Spotify	0.8%
Google Static Content	0.7%
Web Browsing	0.6%

Top Local Hosts

192.168.1.103	61.7%
192.168.1.101	38.3%


Top Remote Hosts

1d.tlu.dl.delivery.mp.mi...	54.8%
download-video.akamaized.net	8.6%
105.255.6.44	7.2%
v.redd.it	7.1%
rr1---sn-woc7knel.googlevideo.c...	5.1%
preview.redd.it	4.1%
redirector.brave.com	3.7%
192.168.1.1	3.3%
rr2---sn-8vq5jvh15-l2ul.googlevideo.com	3.3%

























































































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Live Sessions View – Real-Time Traffic

 Zenarmor Subscription: Business root@OPNsense.localdomain

Connections Threats Blocks Web DNS TLS Layout Filter Last 6 hours Pause Download

		Start	End	Src hostname	Src port	Dest hostname	Dest port	App category	Application	Iface	VLAN	Policy
1.	   	Nov 28, 2023 3:04 AM	Nov 28, 2023 3:04 AM	192.168.1.103	50584	collector.bsg.brave.com	443	Secure Web Browsing	Secure Web Browsing	em1	0	Default
2.	   	Nov 28, 2023 3:04 AM	Nov 28, 2023 3:04 AM	192.168.1.103	50583	collector.bsg.brave.com	443	Secure Web Browsing	Secure Web Browsing	em1	0	Default
3.	   	Nov 28, 2023 3:04 AM	Nov 28, 2023 3:04 AM	192.168.1.103	50581	star-randsrv.bsg.brave.com	443	Secure Web Browsing	Secure Web Browsing	em1	0	Default
4.	   	Nov 28, 2023 3:04 AM	Nov 28, 2023 3:04 AM	192.168.1.103	50582	star-randsrv.bsg.brave.com	443	Secure Web Browsing	Secure Web Browsing	em1	0	Default
5.	   	Nov 28, 2023 3:04 AM	Nov 28, 2023 3:04 AM	192.168.1.103	50580	p3a-json.brave.com	443	Secure Web Browsing	Secure Web Browsing	em1	0	Default
6.	   	Nov 28, 2023 3:03 AM	Nov 28, 2023 3:03 AM	192.168.1.103	50576	star-randsrv.bsg.brave.com	443	Secure Web Browsing	Secure Web Browsing	em1	0	Default
7.	   	Nov 28, 2023 3:03 AM	Nov 28, 2023 3:03 AM	192.168.1.103	50575	star-randsrv.bsg.brave.com	443	Secure Web Browsing	Secure Web Browsing	em1	0	Default
8.	   	Nov 28, 2023 3:03 AM	Nov 28, 2023 3:03 AM	192.168.1.101	38070	dns.google	443	Network Management	DNS over TLS	em1	0	Default
9.	   	Nov 28, 2023 3:03 AM	Nov 28, 2023 3:03 AM	192.168.1.101	38062	dns.google	443	Network Management	DNS over TLS	em1	0	Default
10.	   	Nov 28, 2023 3:03 AM	Nov 28, 2023 3:03 AM	192.168.1.101	28831	dns.google	53	Network Management	Domain Name Resolution	em1	0	Default
11.	   	Nov 28, 2023 3:03 AM	Nov 28, 2023 3:03 AM	192.168.1.101	16305	dns.google	53	Network Management	Domain Name Resolution	em1	0	Default
12.	   	Nov 28, 2023 3:03 AM	Nov 28, 2023 3:03 AM	192.168.1.103	50573	p3a-json.brave.com	443	Secure Web Browsing	Secure Web Browsing	em1	0	Default
13.	   	Nov 28, 2023 3:02 AM	Nov 28, 2023 3:03 AM	192.168.1.101	49170	192.168.1.1	443	Secure Web Browsing	Secure Web Browsing	em1	0	Default
14.	   	Nov 28, 2023 3:02 AM	Nov 28, 2023 3:02 AM	192.168.1.103	50571	p3a-json.brave.com	443	Secure Web Browsing	Secure Web Browsing	em1	0	Default
15.	   	Nov 28, 2023 3:02 AM	Nov 28, 2023 3:02 AM	192.168.1.103	50568	collector.bsg.brave.com	443	Secure Web Browsing	Secure Web Browsing	em1	0	Default
16.	   	Nov 28, 2023 3:02 AM	Nov 28, 2023 3:02 AM	192.168.1.103	50569	collector.bsg.brave.com	443	Secure Web Browsing	Secure Web Browsing	em1	0	Default
17.	   	Nov 28, 2023 3:02 AM	Nov 28, 2023 3:02 AM	192.168.1.101	24316	dns.google	53	Network Management	Domain Name Resolution	em1	0	Default
18.	   	Nov 28, 2023 3:02 AM	Nov 28, 2023 3:02 AM	192.168.1.101	19865	dns.google	53	Network Management	Domain Name Resolution	em1	0	Default
19.	   	Nov 28, 2023 3:02 AM	Nov 28, 2023 3:02 AM	192.168.1.101	60460	chrome.cloudflare-dns.com	443	Network Management	DNS over HTTPS	em1	0	Default
20.	   	Nov 28, 2023 3:02 AM	Nov 28, 2023 3:02 AM	192.168.1.101	60444	chrome.cloudflare-dns.com	443	Network Management	DNS over HTTPS	em1	0	Default
21.	   	Nov 28, 2023 3:02 AM	Nov 28, 2023 3:02 AM	192.168.1.103	50566	p3a-json.brave.com	443	Secure Web Browsing	Secure Web Browsing	em1	0	Default
22.	   	Nov 28, 2023 3:01 AM	Nov 28, 2023 3:02 AM	192.168.1.103	50564	star-randsrv.bsg.brave.com	443	Secure Web Browsing	Secure Web Browsing	em1	0	Default

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Activity Explorer – Grouped view by source

The screenshot displays the Zenarmor Activity Explorer interface. The top navigation bar includes the Zenarmor logo, a search bar, and the user's subscription information: "Zenarmor Subscription: Business" and "root@OPNsense.localdomain". The left sidebar contains a navigation menu with options like Lobby, Reporting, System, Interfaces, Firewall, VPN, Services, Zenarmor (Business), Dashboard, Reports, Live Sessions, Activity Explorer (highlighted), Policies, Settings, Notifications, Power, and Help.

The main content area is titled "Applications" and "Web". It features a "Last 6 hours" filter and a "Pause" button. A "Download" button is also present. The activity is displayed in a table with columns for "Date Time" and "Source / Application / Activity".

Date Time	Source / Application / Activity
11/28/2023 07:15	192.168.1.101 Mozilla, Secure Web Browsing
11/28/2023 07:30	192.168.1.103 Microsoft Defender, Secure Web Br
11/28/2023 07:45	192.168.1.103 Windows Push Notification Service, Web Browsing, Microsoft Teams, Zendesk, Microsoft Office
11/28/2023 08:00	192.168.1.101 Font Awesome, DNS over TLS, Web Browsing, Secure Web Browsing, Google Static Content, G
	192.168.1.103 One Trust, Microsoft Telemetry, Microsoft Windows Live Services Authe
	192.168.1.101 Spotify, Mozilla, Google Services, One Trust, Google Sign In, Vimeo, Goc
	192.168.1.103 MSN Money, Microsoft Office, Secure Web Browsing, Microso
	192.168.1.101 Secure Web Browsing, DNS over TLS, Google Services, DNS o

The right sidebar shows "Details" for the selected activity. It includes a "Date Time" field (11/28/2023 07:15) and a "Total" count (67). Below this, a table lists "Source" and "Activity" for each source. The sources are 192.168.1.101 and 192.168.1.103. The activities are grouped by source and include session counts and IP addresses.

Source	Activity
192.168.1.101	Mozilla, Secure Web Browsing Sessions: 3 IP Address: 192.168.1.1, contile.services.mozilla.com, dash.zenarmor.com Bytes: 192.1 KB / 3.1 MB
192.168.1.103	Microsoft Defender, Secure Web Browsing, Microsoft Telemetry, Microsoft Updates, Microsoft Licensing, Microsoft Windows Live Services Authentication, Microsoft Active Protection Service, Microsoft Windows Sessions: 64 IP Address: 3.au.download.windowsupdate.com, kv501.prod.do.dsp.mp.microsoft.com, win.data.microsoft.com, ctldl.windowsupdate.com, v10.events.data.micro Bytes: 445.1 KB / 10.5 MB

At the bottom of the interface, there are two promotional banners: "Want more power? Zenconsole is the cloud central manager for Zenarmor. Connect to Zenconsole" and "Have feedback? We'd love to hear your feedback on Zenarmor. Send Feedback".

Policies Configuration View

Zenarmor Subscription: Business root@OPNsense.localdomain

POLICIES Create New Policy

Guests	
Kids	
Default	

You can define multiple policies targeting the traffic type or user group of your choice, all with their own granular controls

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Policies Configuration View – Matching Traffic

The screenshot shows the OPNsense Zenarmor interface. On the left is a navigation sidebar with options like Reporting, System, Interfaces, Firewall, VPN, Services, Zenarmor (Business), Dashboard, Reports, Live Sessions, Activity Explorer, Policies, Settings, Notifications, Power, and Help. The main area is titled 'POLICIES' and contains a list of policies: Guests, Kids (selected), and Default. A 'Create New Policy' button is visible. The right-hand pane shows the configuration for the 'Kids' policy, with tabs for Configurations, Security, App Controls, Web Controls, and Exclusions. The 'Configurations' tab is active, showing settings for Status (on), Name (Kids), No Internet (off), Interfaces (em1), Packet Direction (Inbound and Outbound), and VLAN Ids. Below these are sections for IP / Networks, MAC Addresses, Users, Groups, and Time Schedules. A text box with an arrow points to the 'IP / Networks' section.

Per policy matching for traffic type by IP, MAC Address and Users/Groups with the ability to schedule the policy at your choice.

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Policies Configuration View – Security

POLICIES

- Guests
- Kids
- Default**

Default

Configurations Security App Controls Web Controls Exclusions

Essential Security

Category name	Status
Compromised Website	Blocked <input checked="" type="checkbox"/>
DNS over HTTPS	Allowed <input type="checkbox"/>
Firstly Seen Sites	Blocked <input checked="" type="checkbox"/>
Hacking	Blocked <input checked="" type="checkbox"/>
Keyloggers and Monitoring	Blocked <input checked="" type="checkbox"/>
Malware/Virus	Blocked <input checked="" type="checkbox"/>
Parked Domains	Blocked <input checked="" type="checkbox"/>
Phishing	Blocked <input checked="" type="checkbox"/>
Potentially Dangerous	Blocked <input checked="" type="checkbox"/>
Spam sites	Blocked <input checked="" type="checkbox"/>
Spyware and Adware	Blocked <input checked="" type="checkbox"/>

Advanced Security

Category name	Status
Newly Recovered Sites	Blocked <input checked="" type="checkbox"/>
Proxy	Blocked <input checked="" type="checkbox"/>
Dead Sites	Allowed <input type="checkbox"/>
Recent Malware/Phishing/Virus Outbreaks	Blocked <input checked="" type="checkbox"/>
Botnet C&C NEW	Blocked <input checked="" type="checkbox"/>
Dynamic DNS Sites	Blocked <input checked="" type="checkbox"/>
Newly Registered Sites	Blocked <input checked="" type="checkbox"/>
Botnet DGA Domains	Blocked <input checked="" type="checkbox"/>
DNS Tunneling	Coming soon

Default policy providing Essential and Advanced Security Categories

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Policies Configuration View – App Controls

The screenshot displays the OPNsense Zenarmor interface. The sidebar on the left contains navigation options: Lobby, Reporting, System, Interfaces, Firewall, VPN, Services, Zenarmor (Business), Dashboard, Reports, Live Sessions, Activity Explorer, Policies, Settings, Notifications, Power, and Help. The main area is titled 'POLICIES' and shows a list of policies: Guests, Kids, and Default. A 'Create New Policy' button is visible. The 'Kids' policy is selected, and its configuration is shown in a modal window. The modal has tabs for Configurations, Security, App Controls, Web Controls, and Exclusions. The 'App Controls' tab is active, showing a search bar, a toggle for 'Display custom applications only', and a '+ Create Custom App' button. Below this is a table of 'All Categories' with columns for Category Name, Number of blocked sub-categories, and Status.

Category Name	Number of blocked sub-categories	Status
A.I. Tools	0 / 25	Allowed
Ad Tracker	213 / 213	Blocked
Ads	351 / 351	Blocked
Blogs	0 / 54	Allowed
Business Tools	0 / 132	Allowed
Cloud Services	0 / 107	Allowed
Conferencing	0 / 18	Allowed
Database	0 / 19	Allowed
Email	0 / 43	Allowed
File Transfer	0 / 66	Allowed
Gaming	0 / 117	Allowed
Generic TCPIP	0 / 22	Allowed
Infrastructure Services	0 / 19	Allowed
Instant Messaging	0 / 73	Allowed
Media Streaming	0 / 232	Allowed
Mobile Applications	0 / 5	Allowed
Network Management	0 / 42	Allowed
News	0 / 187	Allowed
Online Education	0 / 47	Allowed
Online Shopping	0 / 125	Allowed
Online Utility	0 / 222	Allowed
Proxy	0 / 44	Allowed

Granular App Controls allow you to block apps by type with many categories to choose from

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Policies Configuration View – App Controls

The screenshot displays the Zenarmor Policies Configuration View for App Controls. The interface is dark-themed and includes a sidebar on the left with navigation options: Lobby, Reporting, System, Interfaces, Firewall, VPN, Services, Zenarmor (Business), Dashboard, Reports, Live Sessions, Activity Explorer, Policies, Settings, Notifications, Power, and Help. The main area shows a list of policies: Guests, Kids (selected), and Default. A 'Create New Policy' button is visible. The Kids policy is expanded to show a detailed view of its App Controls. This view includes tabs for Configurations, Security, App Controls (selected), Web Controls, and Exclusions. A list of applications is shown with their status (Allowed) and a toggle switch. A callout box with an orange border and arrow points to this list, containing the text: 'Drilled down view of individual apps you can block, in this example, from the Games category'. At the bottom, there are two notification boxes: 'Want more power?' and 'Have feedback?'.

App Name	Status
4399 Networks	Allowed
Agario Games	Allowed
Ahoy Games	Allowed
Amazon Games	Allowed
Angry Birds	Allowed
Angrybirds	Allowed
AOL Games	Allowed
Bejewled Blitz	Allowed
Bejewled Chrome extension	Allowed
Best Game Lib	Allowed
Bigo	Allowed
Blizzard Games	Allowed
Brawlstar Games	Allowed
Bubble Saga	Allowed
Bubblewitch	Allowed
Burstly	Allowed
Cabal Online	Allowed
Call of War	Allowed
CanvasRider Online game	Allowed
Castleville	Allowed
CCP Games	Allowed
Clash of Clans	Allowed
Daybreak Games	Allowed
Diamond Dash	Allowed
DoubleDownCasino	Allowed
EA Games	Allowed
Epic Games	Allowed
FSTSoft	Allowed

Policies Configuration View – Web Controls

Enforced Safe Search can be applied to policies directly

Web Controls – Block by common categories with the ability to add custom blocked websites

Category name	Status
Adult	Blocked <input checked="" type="checkbox"/>
Advertisements	Blocked <input checked="" type="checkbox"/>
Alcohol and Tobacco	Blocked <input checked="" type="checkbox"/>
Arts and Culture	Allowed <input type="checkbox"/>
Blogs	Allowed <input type="checkbox"/>
Business Services	Allowed <input type="checkbox"/>
Chats	Allowed <input type="checkbox"/>
Clothing and Fashion	Allowed <input type="checkbox"/>
Content Delivery Networks	Allowed <input type="checkbox"/>
Cult and Occult	Allowed <input type="checkbox"/>
Dating	Blocked <input checked="" type="checkbox"/>
Education	Allowed <input type="checkbox"/>
Empty Site	Allowed <input type="checkbox"/>
Entertainment	Allowed <input type="checkbox"/>
Financial Services	Allowed <input type="checkbox"/>
Forums	Allowed <input type="checkbox"/>
Gambling	Blocked <input checked="" type="checkbox"/>
Games	Allowed <input type="checkbox"/>
Generative AI	Allowed <input type="checkbox"/>
Government and Organization	Allowed <input type="checkbox"/>

Policies Configuration View – Exclusions

The screenshot displays the OPNsense Zenarmor interface. On the left is a navigation sidebar with categories like Lobby, Reporting, System, Interfaces, Firewall, VPN, Services, Zenarmor (Business), and Power. The main area is titled 'POLICIES' and shows a list of policies: Guests, Kids (selected), and Default. A 'Create New Policy' button is visible. The 'Kids' policy configuration is shown in a modal window with tabs for Configurations, Security, App Controls, Web Controls, and Exclusions. The 'Exclusions' tab is active, showing 'Add New Exclusions' with a form for Host/IP/Network Address (example.com), List (White list), and Description. There are also 'Global' and 'Feedback' toggle switches. Below this is the 'All Exclusions' section with 'Import' and 'Export' buttons, a search bar, and a table with columns for Host/Ip, List, By, and Action. Two notification boxes are at the bottom left: 'Want more power?' and 'Have feedback?'.

Maintain your exclusions whitelist

Zenarmor Settings Menu

The screenshot shows the OPNsense web interface with the Zenarmor (Business) settings menu open. The left sidebar contains a navigation menu with items like Lobby, Reporting, System, Interfaces, Firewall, VPN, Services, Zenarmor (Business), Power, and Help. The Zenarmor (Business) section is expanded, showing sub-items: Dashboard, Reports, Live Sessions, Activity Explorer, Policies, Settings (highlighted), and Notifications. The main content area is titled 'CONFIGURATION' and contains several settings sections: Deployment mode (set to Routed Mode), Do not pin engine packet processors to dedicated CPU cores (unchecked), Please choose interfaces to protect (with 'em1' selected and 'lan' unselected), Reporting database (set to MongoDB), and an Apply button. A yellow arrow points from the 'Settings' item in the sidebar to the 'CONFIGURATION' section. A yellow box at the bottom right contains the text: 'All Zenarmor settings can be found under this menu and provides a convenient way to manage your firewall'. The top right of the interface shows 'Zenarmor Subscription: Business' and the user 'root@OPNsense.localdomain'.

Zenarmor Settings Menu – Data Management

DATA MANAGEMENT

Set max days to keep ipdrs in report database.

7 days

Warning: We do not advise to set a data retention interval longer than 2 days for mongod backend. For longer periods, Elasticsearch backend is proven to produce better results. [Set 2 days](#)

STREAM REPORTING DATA TO SYSLOG

Syslog Server IP Address
Hostname or ip address

Syslog Server Port
514

Syslog Server Protocol
 TCP UDP

Indexes
Connections Web DNS TLS Alerts

[Save & Enable](#)

STREAM REPORTING DATA TO EXTERNAL ELASTICSEARCH

External Elasticsearch URL
URL

External Elasticsearch Username
Username

External Elasticsearch Password
Password

[Save & Enable](#)

REPORTING DATABASE SETTINGS

Callout: Stream reporting data via syslog to your SIEM of choice or connect directly to a remote Elasticsearch instance

Zenarmor Settings Menu – Scheduled Reports

The screenshot displays the Zenarmor web interface. The top navigation bar shows 'Zenarmor Subscription: Business' and the user 'root@OPNsense.localdomain'. The left sidebar contains various settings categories, with 'Scheduled Reports' highlighted under the 'VPN' section. The main content area is titled 'SCHEDULED REPORTS' and is currently 'Disabled'. The configuration fields are as follows:

- Mail Provider: SMTP Server
- Mail Server Hostname: 127.0.0.1
- Mail Server Port: 25
- Connection Security: No Security
- Username: Username
- Password: Password
- Sender Email Address: Email addresses
- Recipients: No recipients have been added yet. (Add Recipient button)
- Reporting Criteria: Volume
- Schedule: 12:45 AM, Everyday
- Do not require TLS server certificate verification:
- Send reports as PDF attachments:

A callout box with an orange border and text points to the 'Scheduled Reports' menu item in the sidebar:

Setup scheduled reports to be emailed to you when you need them.

At the bottom of the page, there is a 'Save' button and a 'Charts & Reports' link. A feedback prompt is visible in the bottom left corner: 'Have feedback? We'd love to hear your feedback on Zenarmor. Send Feedback'.

Zenarmor Settings Menu – AD Integration

The screenshot displays the Zenarmor web interface. The top navigation bar includes the OPNsense logo, a search icon, and user information: "Zenarmor Subscription: Business" and "root@OPNsense.localdomain". The left sidebar contains a menu with categories like Lobby, Reporting, System, Interfaces, Firewall, VPN, Services, Zenarmor (Business), Power, and Help. The Zenarmor (Business) sub-menu is expanded, showing options like Dashboard, Reports, Live Sessions, Activity Explorer, Policies, Settings (highlighted), and Notifications. The main content area is titled "ACTIVE DIRECTORY INTEGRATION" and contains the following elements:

- A blue button labeled "+ Generate API Key".
- A section for a generated API key: "Token 70d6b35daa5c8c8fba8ee2189c198d8d" with a "Copy" icon, a green "Enabled" status indicator, and a red "Revoke" button. Below the token, it says "Added on 2023-11-28 09:36:48".
- A "Download AD Agent" section with a download icon, the text "Download Microsoft Active Directory Agent and empower your network security with User/Group based filtering.", and a "Go to Download Page" link.
- A "Reference Documentation for the Active Directory Integration" section with an "Integration Documentation" link.

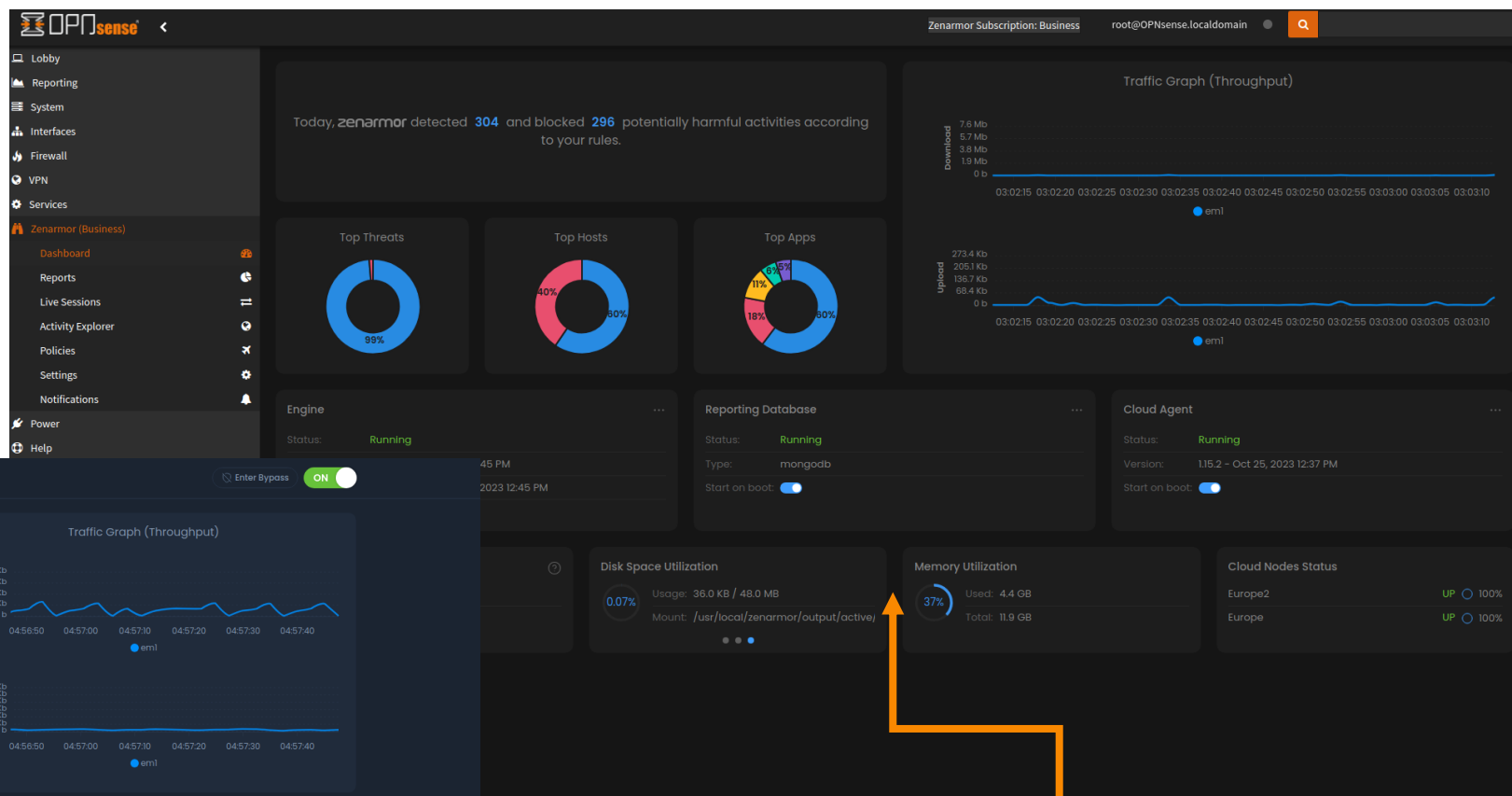
An orange arrow points from a text box at the bottom to the "Reference Documentation" link. The text box contains the following text:

AD Integration to assign AD users and groups to your Zenarmor policies.

At the bottom left, there is a "Have feedback?" notification with the text "We'd love to hear your feedback on Zenarmor." and a "Send Feedback" link.

Zenconsole Vs OPNsense Zenarmor Dashboards

Zenconsole Cloud Management Dashboard is best for managing multiple Zenarmor deployments from a single "pane of glass."



OPNsense Zenarmor Dashboard, identical to Zenconsole, no matter how you choose to manage Zenarmor, you will have a consistent user experience throughout.



Are you ready to try
Zenarmor?

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