OPNsense Series Hub

18 Guides for Enterprise Network Infrastructure

Firewall · VLANs · WireGuard VPN · IDS/IPS · SIEM · HA

From pfSense/OPNsense comparison to NetFlow/ntopng

OPNsense — Series Hub

18 Guides for Enterprise Network Infrastructure

Entry point for the BOTUM OPNsense series. This document presents the 18 guides in the series, their logical progression, and the enterprise reference architecture.

1. Why OPNsense in 2026?

OPNsense has established itself as the open source reference for enterprise network infrastructure. A pfSense fork since 2015, it offers a native REST API, weekly updates, and a complete plugin ecosystem (CrowdSec, Suricata, Zenarmor, WireGuard).

Against proprietary alternatives:
- **vs pfSense**: More modern interface, integrated API, faster innovation.
- **vs Fortinet FortiGate**: 80% of features at 0% licensing cost.
- **vs Cisco ASA**: Coherent alternative without Cisco ecosystem lock-in.
- **vs cloud solutions**: On-premise, full visibility, predictable costs.

According to an IDC 2025 study, 43% of SMBs with 50–500 employees are looking to reduce network licensing costs by 2027.

2. The 5 Series Phases

Phase 1 — Evaluation and Deployment (B1-B4)

pfSense/OPNsense comparison, self-hosted WireGuard SD-WAN, security stack on Proxmox, complete installation.

Phase 2 — Segmentation and Access (B5-B7)

VLANs with Zero Trust model, WireGuard VPN + LTE failover, WiFi AP management.

Phase 3 — Detection and Protection (B8-B11)

CrowdSec + fail2ban IDS/IPS, NAC FreeRADIUS 802.1X, Suricata DPI, AdGuard DNS-over-HTTPS.

Phase 4 — Observability and Resilience (B12-B14)

Grafana + InfluxDB monitoring, CARP high availability, Wazuh SIEM.

Phase 5 — Automation and Maintenance (B15-B18)

OPNsense as Code Ansible, automated backup, Lets Encrypt ACME, NetFlow + ntopng.

3. Index of 18 Guides

#	Guide	URL
B1	pfSense vs OPNsense — the comparison	blog.botum.ca/pfsense-vs-opnsense-enterprise-firewall/
B2	DIY SD-WAN with WireGuard + OPNsense	blog.botum.ca/sdwan-diy-wireguard-opnsense/
B3	Enterprise Security Stack on Proxmox	blog.botum.ca/opnsense-enterprise-network-stack-overview/
B4	Install OPNsense in Proxmox	blog.botum.ca/install-opnsense-proxmox-complete-guide/
B5	VLANs & Zero Trust	blog.botum.ca/opnsense-vlans-zero-trust-guide/
B6	WireGuard VPN + LTE failover	blog.botum.ca/opnsense-wireguard-vpn-sdwan-lte-failover/
B7	WiFi & AP Management	blog.botum.ca/opnsense-wifi-ap-management-vlans/
B8	CrowdSec + fail2ban IDS/IPS	blog.botum.ca/opnsense-crowdsec-fail2ban-guide/

B9	NAC FreeRADIUS 802.1X	blog.botum.ca/opnsense-nac-freeradius-802-1x-guide/
B10	Suricata IDS/IPS & DPI	blog.botum.ca/opnsense-suricata-ids-ips-guide/
B11	AdGuard Home + DNS over HTTPS	blog.botum.ca/opnsense-adguard-home-dns-https-guide/
B12	Grafana + InfluxDB Monitoring	blog.botum.ca/opnsense-monitoring-grafana-influxdb-guide/
B13	CARP High Availability	blog.botum.ca/opnsense-carp-high-availability-guide/
B14	Wazuh SIEM — Log Centralization	blog.botum.ca/opnsense-wazuh-siem-log-centralization/
B15	OPNsense as Code with Ansible	blog.botum.ca/opnsense-ansible-infrastructure-as-code/
B16	Automated Config Backup	blog.botum.ca/opnsense-automated-config-backup/
B17	Let's Encrypt & ACME	blog.botum.ca/opnsense-lets-encrypt-acme-certificates/
B18	NetFlow + ntopng — Traffic Analysis	blog.botum.ca/opnsense-netflow-ntopng-traffic-analysis/

Deploy Your OPNsense Infrastructure with BOTUM

These 18 guides cover the essentials of enterprise network infrastructure. In production, every environment has its constraints — sizing, HA, compliance, SIEM integration. BOTUM teams guide you from initial audit to production deployment.

https://www.botum.ca/contact