



KarnakPanel

v1.5.45BETA TESTING ONLY

Self-hosted hosting control panel for Ubuntu 24.04 LTS / Debian 13. One install command, full mail / web / DNS stack — and a **free drag-and-drop site builder built in**. No license server, no lock-in.

Security is the priority — a hosting panel controls root, so we treat it like it. Code scanned by Semgrep.

★ github.com/StuBlueUK/karnakpanel

100% FREE · No license server · No paywall · Karnak Builder included | info@karnakpanel.com | Beta: test@karnakpanel.com | karnakpanel.com



Karnak Builder

NEW IN V1.5.45 · INCLUDED FREE

A **free drag-and-drop website builder** built right into KarnakPanel. Start from **75 templates in 10 categories** — trades, food, health, business, creative, tech, travel, community, shops & retail and more — or a blank canvas. Filter the gallery, preview live, then edit with autosave, roll-back history and private previews. Your clients build their own sites on the server you own — **at \$0**.



75 starter templates

Ten categories, each card showing its colours, style, page count and font, with a live click-through preview.



Edit everything

Images upload straight onto the page; blocks for FAQ, photo slider, social links, hours, team, price list — plus a `/blog/` with tags, drafts, RSS and sitemap.



Drag, drop, done

Drag sections where you want them; desktop, tablet and phone views. Nine site styles with Quick looks.



Static + cleaned

Published sites are plain static files, cleaned server-side (`no scripts` ; YouTube / Vimeo / OpenStreetMap embeds only).



Private previews

Share a secret link before publishing; publish, offline, back online.



Tenant-safe

All builder file work runs as the account's own user; one editor at a time. A package limit, off by default.



Security is the priority

PRIORITY #1

Every item below is a mechanism in v1.5.45 — implemented, not proven. Code scanned with Semgrep in CI; independent review pending. Full details on the Security page.



Updates designed to be verifiable

`Ed25519-signed` self-updates and installer releases verified against a build-host key — downgrades, replays and unsigned tarballs refused. Snapshot before every update; auto-rollback on failed health checks.



Tenants isolated by design

Per-user PHP-FPM pools with `open_basedir` + `disable_functions`, and **customer PHP in a systemd sandbox** — read-only system, own process list and `/dev/shm`, setuid and low-level calls blocked. Private `/tmp` per account; the web server reads only website folders; the panel runs as its own user.



Self-reviewed, awaiting independent review

Internal sweep across all 132 POST routes, all queries, all views, all shell handling. ShellCheck + PHP lint in CI, least-privilege sudo, prepared statements throughout. Independent review pending.



Logins that resist people

TOTP 2FA `enforced for admin + reseller`, `breached-password checks` on every password set (HIBP k-anonymity, nothing leaves the server), panel-login + login-flood Fail2ban jails, new-IP login alerts.



Defences on by default

Per-domain `bot shield`, upload webshell block + antivirus, ClamAV mail rejection, Fail2ban across SSH/web/mail/FTP/panel, egress canary alerts, CSRF on every state-changing route.



Mail & DNS safety

SPF hard-fail option, DKIM wizard, DMARC visibility, deliverability score out of 100, nightly blacklist monitoring. One-click DNSSEC with DS output, strict CAA/SRV/SSHFP validation, zone validation with rollback on BIND rejection.

The stack — proven parts, pre-wired



Web

OpenLiteSpeed + LSCache, per-domain `PHP 8.3/8.4/8.5` pools (panel on 8.5), `Let's Encrypt` SSL with force-HTTPS, background subdomain certs, OLS rewrite editor with `.htaccess` import.



DNS + DNSSEC

Authoritative BIND9 (A-NS, CAA, SRV, SSHFP), one-click DNSSEC with DS output, secondaries per domain, validate-and-rollback on reload, server nameservers by default.



Backups

Full + incremental backups with selective restore, `AES-256-CBC` per-user encryption, encrypted offsite mirror (S3 / SFTP / local), `restic` snapshots, cPanel + HestiaCP importers.



Monitoring

Live dashboard stats, people-vs-bots split, scanner probes, downtime + Telegram alerts, nightly malware and blacklist checks, usage alerts at 80/95%.



Mail

Exim4 + Dovecot + SpamAssassin + ClamAV, SMTP/IMAP with enforced TLS, Roundcube (pinned + signed), autoresponders, DKIM wizard, deliverability autopilot, IMAP mailbox import, blacklist monitoring.



Files & databases

MariaDB wizard with per-user caps; chrooted TLS-only `vsftpd`; CodeMirror editor and a file manager with dotfiles, 30-day Trash, chunked upload, zip/tar extract + pack.



Apps & installs

WordPress (+ staging, Fleet Updates), Joomla 6, Drupal 11, PrestaShop, phpBB, Flarum, Vvweb. Live install progress; installed apps can be removed (files and optionally the database).



Resellers + API + updates

Packages with enforced limits, reseller branding, Reset PW/2FA; role-scoped API tokens + WHMCS hooks; cPanel + HestiaCP migration; signed self-update with auto-rollback.

How KarnakPanel compares (free panels)

Correct at time of writing (v1.5.45). Competitors are good products — here is where each one differs in practice.

Feature	KarnakPanel	HestiaCP	CyberPanel	aaPanel
Price / license	Free forever, no paywall, no license server	Free & open source	Free core (OLS); paid tiers + add-ons	Free core; many plugins paid
Web server	OpenLiteSpeed + LSCache	Nginx + Apache / Nginx-only	OpenLiteSpeed (Ent. paid)	Nginx / Apache / OLS
Mail stack	Exim + Dovecot + SA + ClamAV, lists, sieve, scoring	Exim + Dovecot + SA + ClamAV	Postfix + Dovecot + Rspamd	Postfix + Dovecot (variant)
DNS + DNSSEC	One-click DNSSEC + DS output, validation	BIND, manual DNSSEC	PowerDNS, manual DNSSEC	BIND/PowerDNS, manual DNSSEC
Backups	Incremental + restic engine + encrypted + offsite mirror + cPanel importer	Full + incremental	Incremental (v2)	Scheduled, S3 (some paid)
1-click apps	WordPress (+ staging, Fleet Updates), Joomla 6, Drupal 11, PrestaShop, phpBB, Flarum, Vvweb	WordPress + app installer	WordPress + staging	WordPress + many (some paid)
Website builder	Karnak Builder built in — drag & drop, 75 templates in 10 categories, blog, free	No	No	Plugin ecosystem (varies)
Signed updates + 2FA enforcement	Yes	No / No	No / No	No / No
Bot shield + upload AV + egress watch	Yes	No	No	No
Billing	HostBMS module built in (early dev) · WHMCS hooks	No	No	Partial / paid
Best for	Single-VPS hosts wanting OLS + mail + DNS free	General shared hosting	OLS speed + WP staging	Beginners wanting GUI plugins

Requirements & honest limits

OS: Ubuntu 24.04 LTS / Debian 13 fresh

RAM: 2 GB min · 4 GB+ with ClamAV

Disk: 20 GB SSD min · 50 GB+ recom.

Access: root SSH (+ key recommended)

Packages: Karnak Builder sites — a package limit, off by default

Ports: 22 SSH · 25/587/465 mail · 53 DNS · 80/443 web · 143/993 IMAP · 21 FTPS · 8090 panel · 8091 webmail · 8092 phpMyAdmin.

Honest limits (v1.5.45): single-server only · no built-in billing (WHMCS hooks, or the HostBMS module, which is early development) · Ubuntu 24.04 LTS / Debian 13 + OpenLiteSpeed only. Beta — expect glitches and report them. No independent security review yet.



HostBMS — billing module, works with KarnakPanel out of the box

EARLY DEVELOPMENT · v0.2 preview · not production ready

[hostbms.com](#) is a self-hosted billing platform for web hosts and a WHMCS alternative. It runs clients, orders, invoices, payments, provisioning and support in one app on your own server. Free to use, source included, no ionCube, no licence server. The **KarnakPanel server module is built in**: accounts are created, suspended, unsuspended and deleted on your KarnakPanel automatically.



KarnakPanel module built in

Provisioning runs against your panel with no extra wiring. Optional client self-service for domains, SSL, DNS, email, databases and backups.



Payments

Stripe (hosted checkout, saved cards, automatic renewals, refunds), Mollie (cards, PayPal, iDEAL, Klarna, recurring mandates) and bank transfer. Card numbers never touch your server.



WHMCS-friendly

Same PHP / MySQL / Smarty stack, WHMCS-style modules and API actions, and a built-in migrator for clients, products, services, domains, invoices and tickets, keeping the same IDs.



Clients, orders & invoices

Orders, invoices, payments, quotes and a support desk in one app. Visual order forms with featured plans, upsells and A/B tests.



Smart dunning

Reminder, card retry, late fee, suspend and terminate steps on your schedule. Stops retrying on hard declines and catches up after downtime.



Secure by default

Staff 2FA, role permissions, login lockouts, a log of every change, encrypted secrets, and a background job queue so a slow API never blocks checkout. UK defaults: GBP, Europe/London.

[hostbms.com](#) · PHP 8.1–8.3 · MySQL / MariaDB · one cron line every 5 minutes · info@hostbms.com

Testers wanted for v1.5.45. Fresh Ubuntu 24.04 LTS / Debian 13 + root SSH is all you need.

Email test@karnakpanel.com — early access, direct input, founder credit. github.com/StuBlueUK/karnakpanel

Yes, we are new and there will be glitches — but we are here to stay, with full user support. Never a paywall; donations welcome.