



Dokploy

Self-hosting made easy... yet again!

By Richard O'Donoghue For 8th April 2026 PLUG Meeting

Recap...

- In September 2024 you may recall I made a presentation on Coolify - a PaaS (Platform as a Service)
- It has great features like easy docker orchestration and Github integrations, automated backups, webhooks, pull request deployments and monitoring
- Ability to spin up and connect multiple nodes through ssh
- Self-hostable
- Ticked most the philosophical boxes



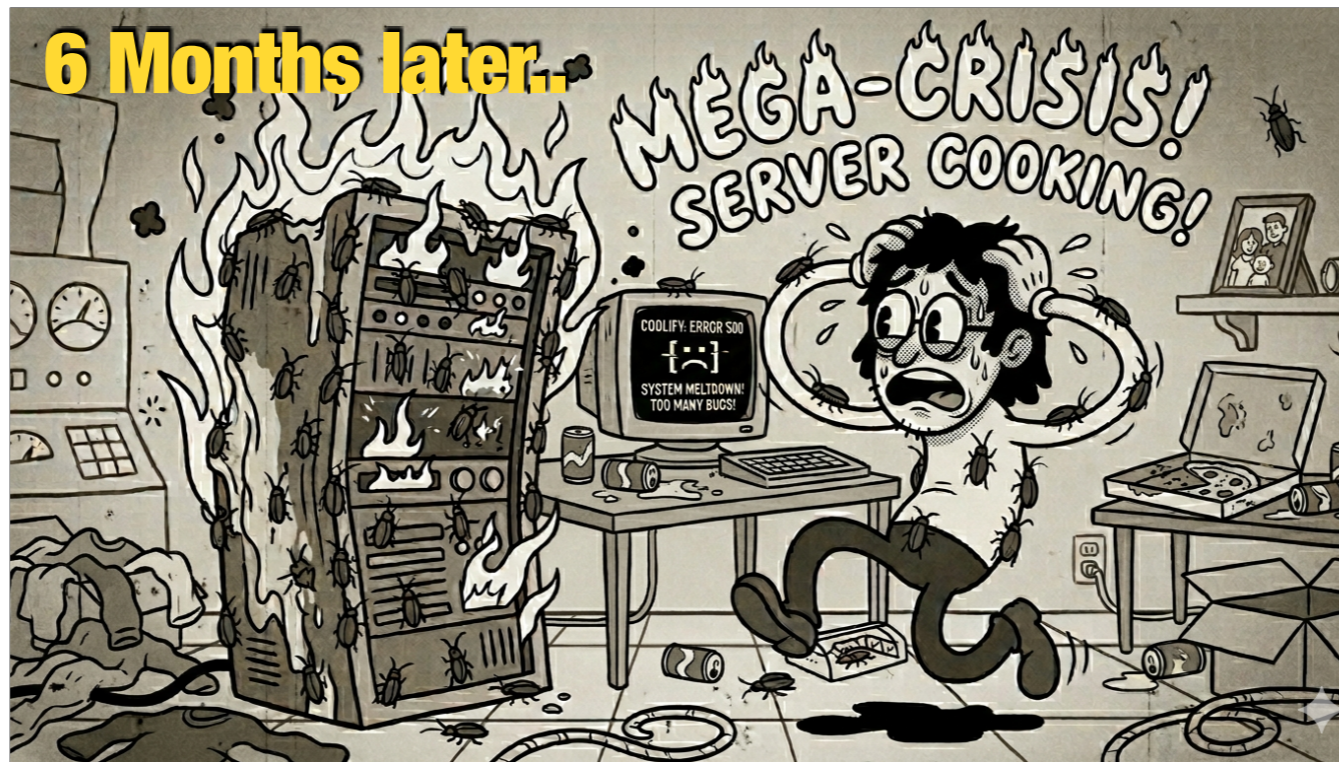
Uses:

CCTV server

Hosting web apps I have built

Multimedia services such as jellyfin

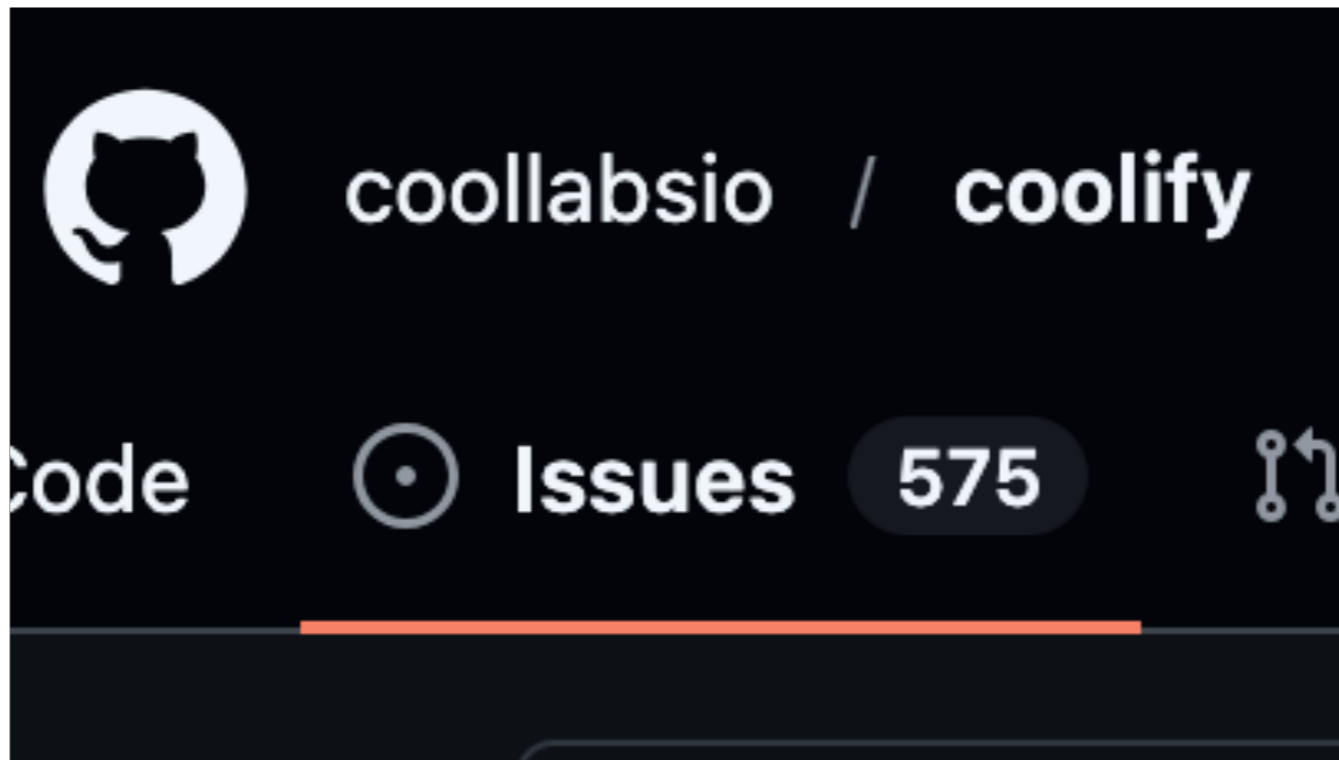
Productivity tools such as Huly, Excalidraw.



Talk about:

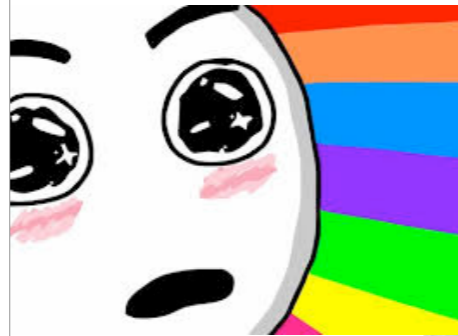
- Unreliability -> 6 months of problems.
- Constant breaking changes -> completely remodelling of how environment variables work.
- Lost data -> Failed backups, failed cron jobs, just shit.
- Insane CPU usage at idle.
- Why it went so bad (new builds almost every day, from v4 they moved into a “beta branch” with no stable branch, introduced AI into development, no safe guards, no testing).





As of 6th of April only 30 of these were not bug reports.
The first 5 pages of bug reports being created this year alone.

The Answer To All My Problems



So what's Dokploy and why is it the solution?

- A very powerful deployment tool with all the bells and whistles.
- Simple yet highly configurable.
- Powered by Docker Swarm.
- Integrations galore
 - Git integrations (Bitbucket, Github, Gitlab, Gittea)
 - Docker Registry (Required for Swarm cluster)
 - AI providers.
 - SSH for connecting to remote servers
 - Exhaustive list of bucket storage providers
- Feature parity with Coolify (with even more on top).
- Less frequent updates with plenty of testing activity before releases.
- Excellent Documentation

Bells and whistles:

- Integration with popular git platforms (Bitbucket, Github, Gitlab, Gitea).
- S3 providers (Cloudflare R2, AWS S3, Minio) - for backups (not just databases).
- AI assisted deployments

Apache Licence just like Coolify

Its lightweight so can be run on low spec machines with as little as 2GB of RAM. (At idle it uses about 250mb)

Traefik setup has sensible defaults, can be adjusted if you have advanced needs.

Supports clustering through Docker Swarm as opposed to SSH.

Dokploy backs up docker volumes as well as databases, where as Coolify only backs up databases.

Simpler user interface

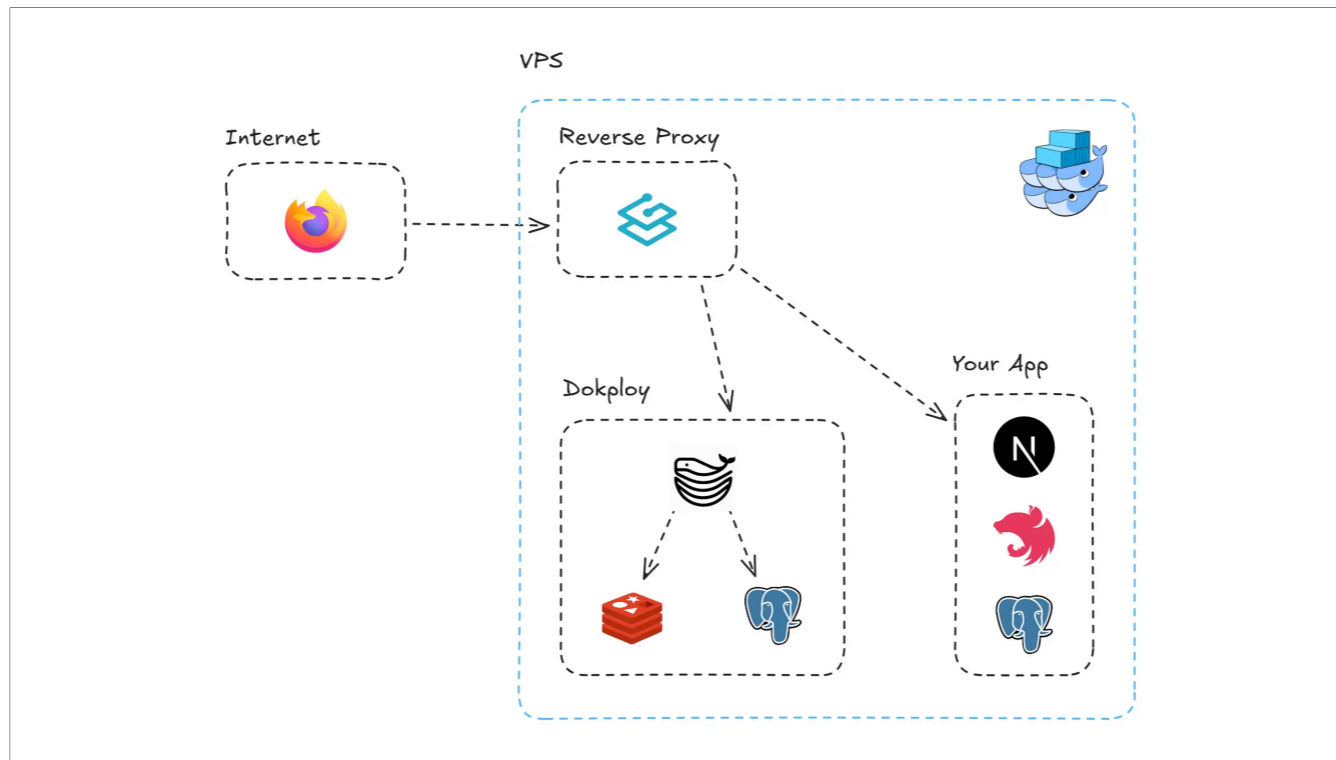
Per container logging, shell access monitoring all through the UI.

What's swarm? Docker's built in decentralised cluster orchestration solution.

- Hook in multiple servers, automatically load balance them, shift containers between nodes and so on.
- Think of it as a simpler Kubernetes stack.

Drawbacks: some features are blocked behind a licence paywall however these features aren't really necessary for a home lab setup.

Adding services that need their own docker network (eg Glutun) can be a bit messy as Dokploy automatically injects Dokploy network config into the docker compose file at deployment time.



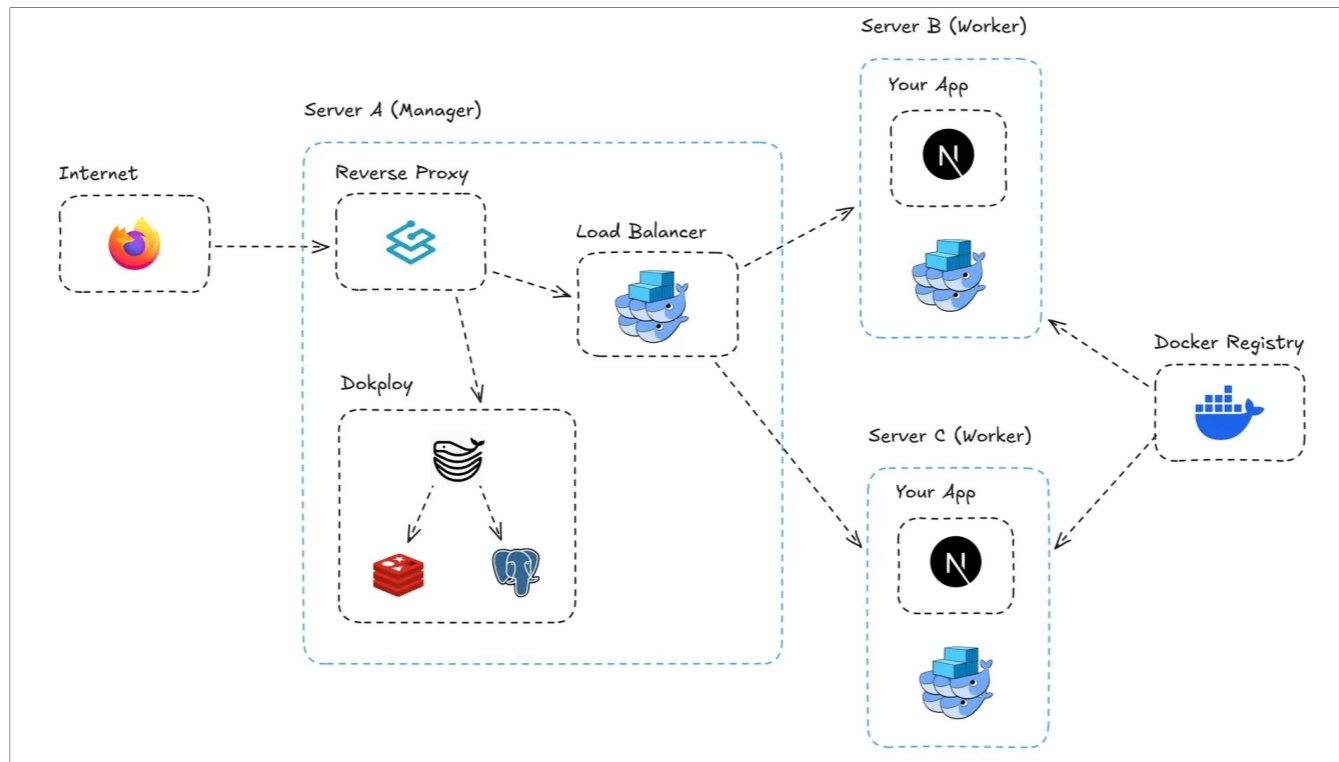
Next.js Application: Serves as the frontend interface. Utilizing Next.js allows for an integrated server-side rendering experience, streamlining the UI and backend into a single cohesive application.

PostgreSQL Database: Acts as the primary database for Dokploy, chosen for its robustness and widespread adoption. It stores all the configuration and operational data.

Redis Database: Employed for managing deployment queues. This ensures that multiple deployments do not trigger simultaneously, which could lead to high server load and potential freezing.

Traefik: Used as a reverse proxy and load balancer. Traefik facilitates dynamic routing and service discovery which simplifies the configuration process by allowing declarative setup through the UI.

Docker Swarm Underneath.



Optionally if you're wanting to scale, you can do so with Swarm. Here's a diagram of what that looks like.

A single server functions as a manager, while others function as workers which are load balanced automatically.

Docker Registry is used for

Docker uses a mixture of gRPC, VX Lan and embedded DNS servers inside of each server. Mutual TLS being used for encryption.

How to install

You need

- 1 VPS or Server with 2GB of RAM and 30GB storage

One command install script

```
curl -sSL https://dokploy.com/install.sh | sh
```

Copy Pasta, auto script install.

If your VPS or server does not have docker already, the install script will take care of it for you.

Setup is a breeze, set up an account, give it a domain name, do all the normal DNS things.

Dokploy also hosts their own paid cloud solution if you aren't interested in self managing / hosting.

Demo Time

The end

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