



Self-Hosting Crash Course

by Dylan Vidal



Objectives

1. Understand what “hosting” is in terms of Software Development.
2. Recognize key things to consider when hosting an application.
3. Understand the spectrum between bare-metal and serverless
4. Learn how to deploy an application via “self-hosting”

Agenda

1. What is Hosting?
2. Bare-Metal vs Serverless
3. What is a Virtual Private Server
4. Self-Hosting FOSS
5. Walking through deployment



Hosting

What does “hosting” an application even mean?

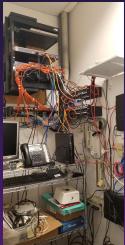
Hosting

Once an app leaves development, it will need to be hosted *somewhere* in order for it to be publicly accessible.

Note: in development, your apps are *hosted* locally :P

The Spectrum

“Bare-Metal”



“Serverless”





Considerations

1. Pricing
2. Performance & Scalability
3. Resources
4. Availability
5. Ownership
6. Vendor Lock-In
7. Ease of Use / Convenience
8. Learning Curve

Pricing

“Bare-Metal”



More Expensive

“Serverless”



Performance

“Bare-Metal”



“Serverless”



Depends

Scalability

“Bare-Metal”



“Serverless”



Depends, but
usually
serverless

Resources

“Bare-Metal”



Ambiguous

“Serverless”



Availability

“Bare-Metal”



“Serverless”



You own it,
always

Ownership

“Bare-Metal”



“Serverless”



You have full
control of the
system

Lock In

“Bare-Metal”



“Serverless”



HUGE con to
serverless...

Convenience

“Bare-Metal”



Managed
Services

“Serverless”



Learning Curve

“Bare-Metal”



Yikes...

“Serverless”





**Extremes and
absolutes suck**



Where do I
stand?

Where I stand

“Bare-Metal”



“Serverless”



Enter: Coolify

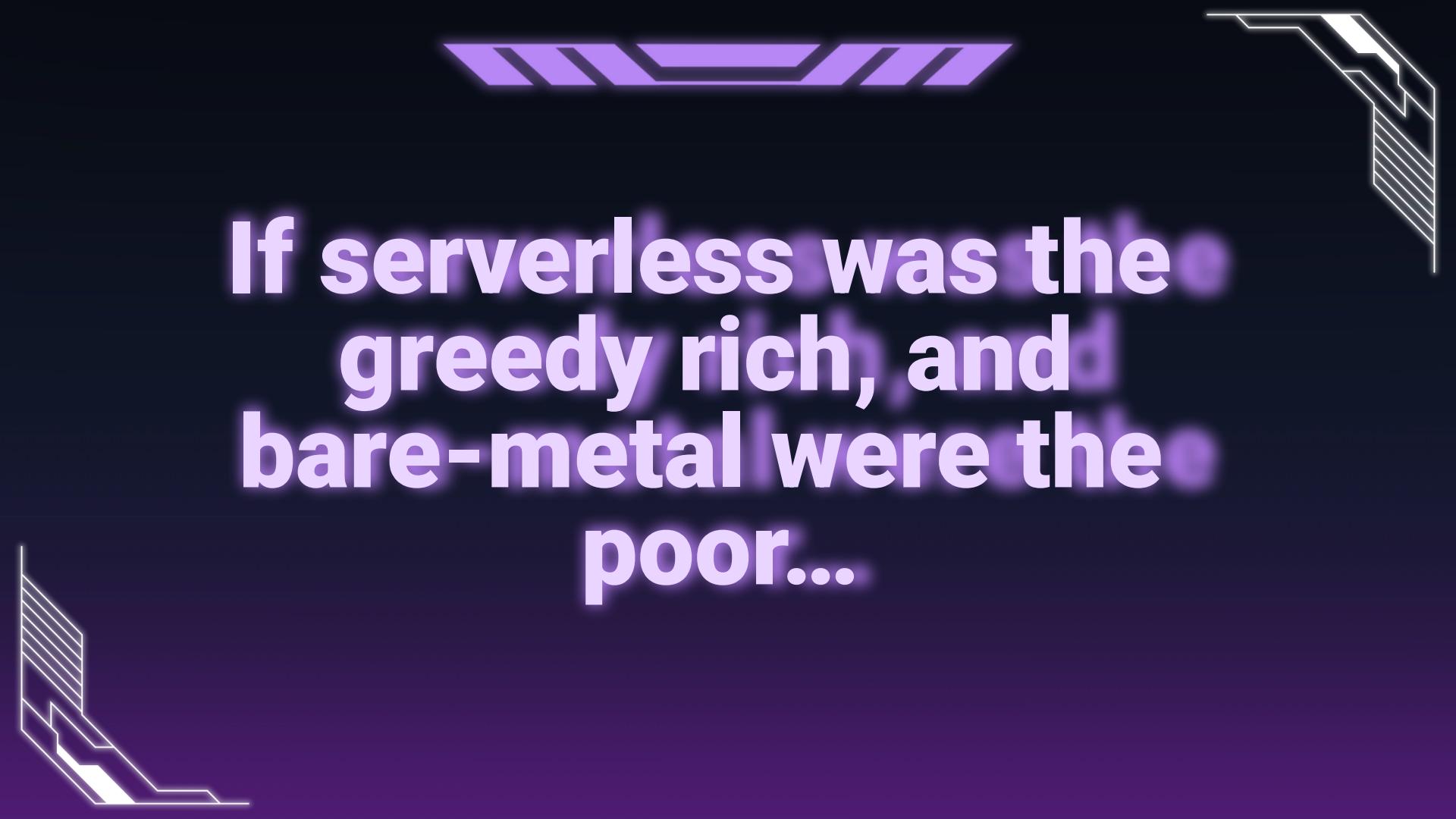
“Bare-Metal”



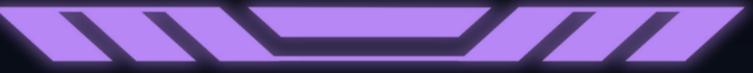
C

“Serverless”





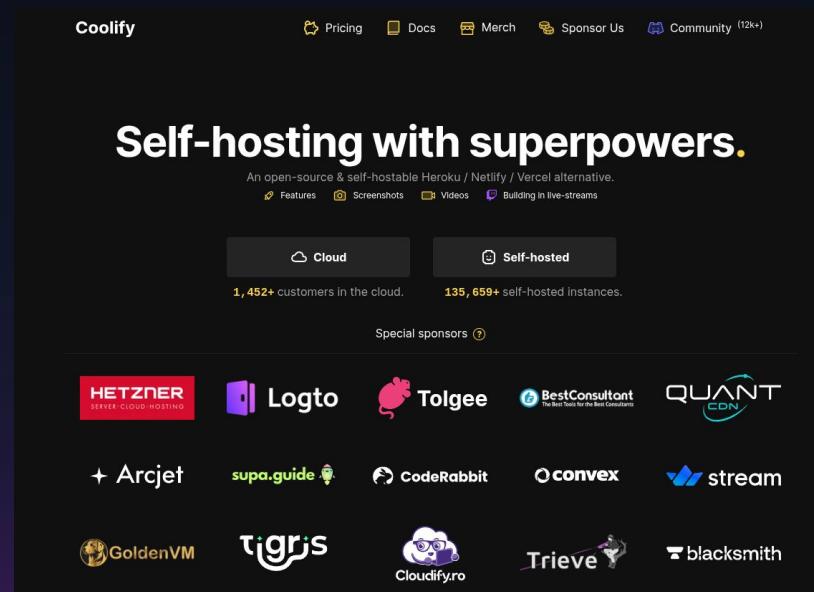
If serverless was the
greedy rich, and
bare-metal were the
poor...



**Coolify is the
Robinhood of
Hosting**

Coolify

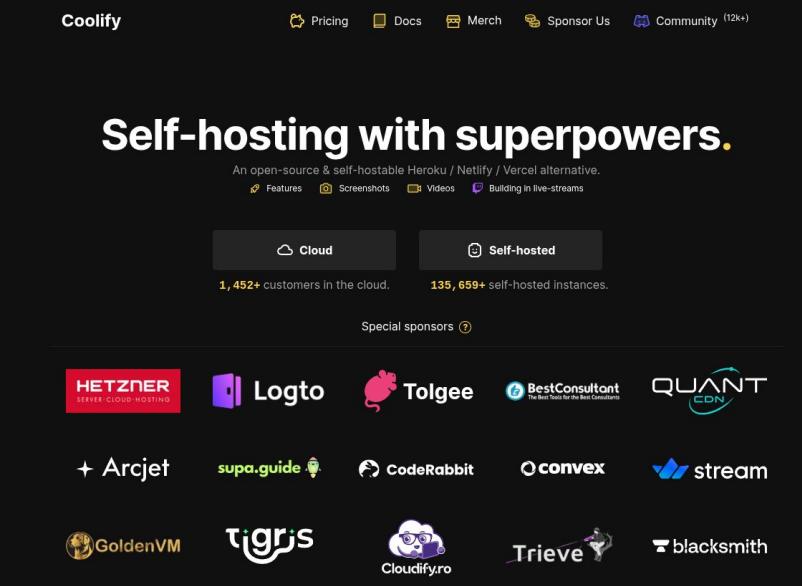
Coolify is an open source server-management tool that brings the benefits of serverless back to your servers.



The screenshot shows the Coolify website homepage with a dark theme. At the top right, there's a navigation bar with links for Pricing, Docs, Merch, Sponsor Us, and Community (12k+). Below the navigation, a large heading reads "Self-hosting with superpowers." with a subtitle "An open-source & self-hostable Heroku / Netlify / Vercel alternative." Underneath are links for Features, Screenshots, Videos, and Building live-streams. Two buttons are present: "Cloud" with a cloud icon and "Self-hosted" with a server icon. Below these buttons, it says "1,452+ customers in the cloud." and "135,659+ self-hosted instances." A section for "Special sponsors" follows, featuring logos for Hetzner, Logto, Tolgee, BestConsultant, Quant, Arcjet, supa.guide, CodeRabbit, Convex, Stream, GoldenVM, Tigris, Cloudify.ro, Trieve, and blacksmith.

Coolify

1. Simple, but extensible
2. Preconfigured presets
3. Service integrations
4. CI/CD and automations
5. Complete ownership



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Any Language

Deploy static sites, APIs, backends, databases, and more with support for all major frameworks.



Any Server

Deploy to any server — VPS, Raspberry Pi, EC2, your Laptop, and more via SSH.



Any Use-Case

Supports single servers, multi-server setups, and Docker Swarm clusters (K8s coming soon).



Any Service

Deploy any Docker-compatible service, plus a wide range of one-click options.



Push to Deploy

Git integration with GitHub, GitLab, Bitbucket, Gitea, and other platforms.



Free SSL certificates

Automatically sets up and renews Let's Encrypt SSL certificates for custom domains.



No Vendor Lock-In

Your data and settings stay on your servers for full control and easy portability.



Automatic DB Backups

Back up data to S3-compatible storage and restore it with one click if needed.



Webhooks

Integrate with CI/CD tools like GitHub Actions, GitLab CI, or Bitbucket Pipelines.



Powerful API

Automate deployments, manage resources, and integrate with your existing tools easily.



Real-Time Terminal

Run server commands directly from your browser in real-time.



Collaborative

Share projects with your team, control roles, and manage permissions.



Pull Request Deployments

Deploy commits and pull requests separately for quick reviews and faster teamwork.



Server Automations

Handles server setup tasks automatically after connection, saving you time.

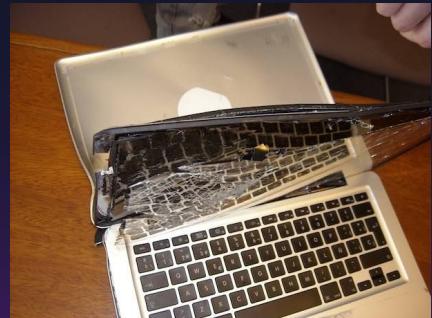


Monitoring

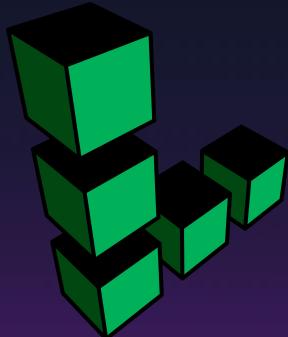
Monitor deployments, servers, disk usage, and receive alerts for issues.

<https://coolify.io>

Where to deploy Coolify?



Virtual Private Servers





Why a VPS?

1. Some of the benefits of serverless.
2. No one wants to manage a server rack.
3. Handles exposing to the internet for you.
4. Availability, backups, and minor managed features

Let's Acquire a VPS!

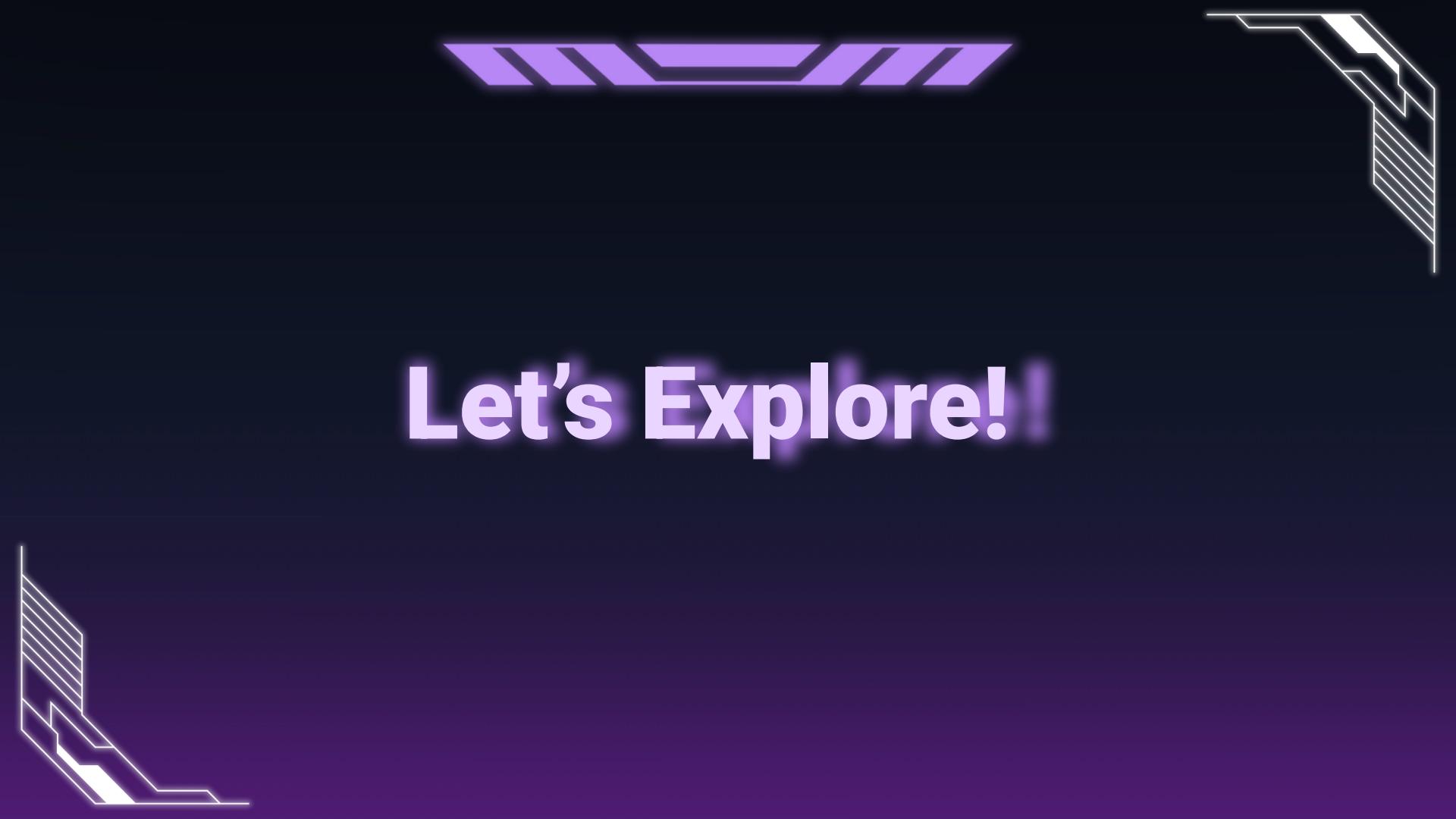
OVH Cloud VPS

ssh user@ip

Install Coolify!

```
sudo -i
```

```
curl -fsSL https://cdn.coollabs.io/coolify/install.sh | bash
```



Let's Explore!!

Things to Explore

1. Projects + Preset Services
2. Application Sources
3. CI/CD Notifications
4. Proxy / Domain Handling
5. Wildcard Domains

Let's Deploy!

1. Setup a Domain
2. Configure Coolify
3. Full-Stack NextJS Application
4. Postgres Database
5. Analytics Engine



Any Questions?



Thank You!

Leave Feedback on Blade!