My Server Setup
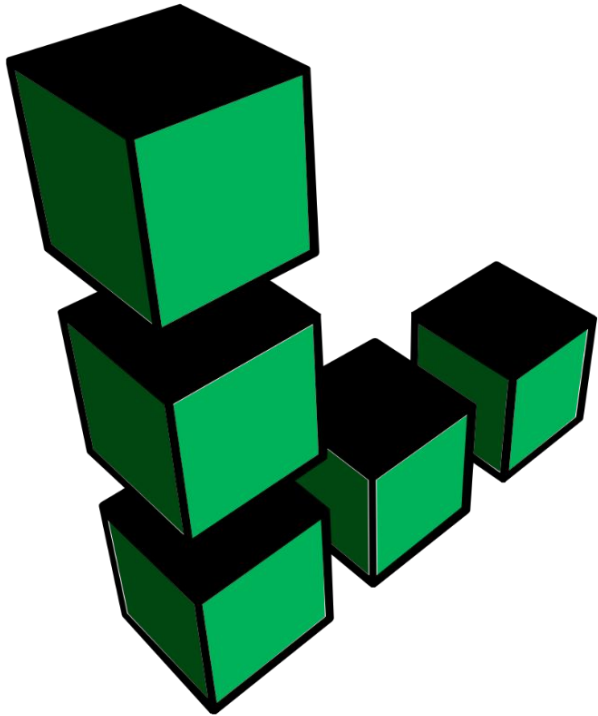
Ben Goldberg

What I Host

- Websites
- Discord bots
- Web apps
- Calendar/Contacts sync

Linode
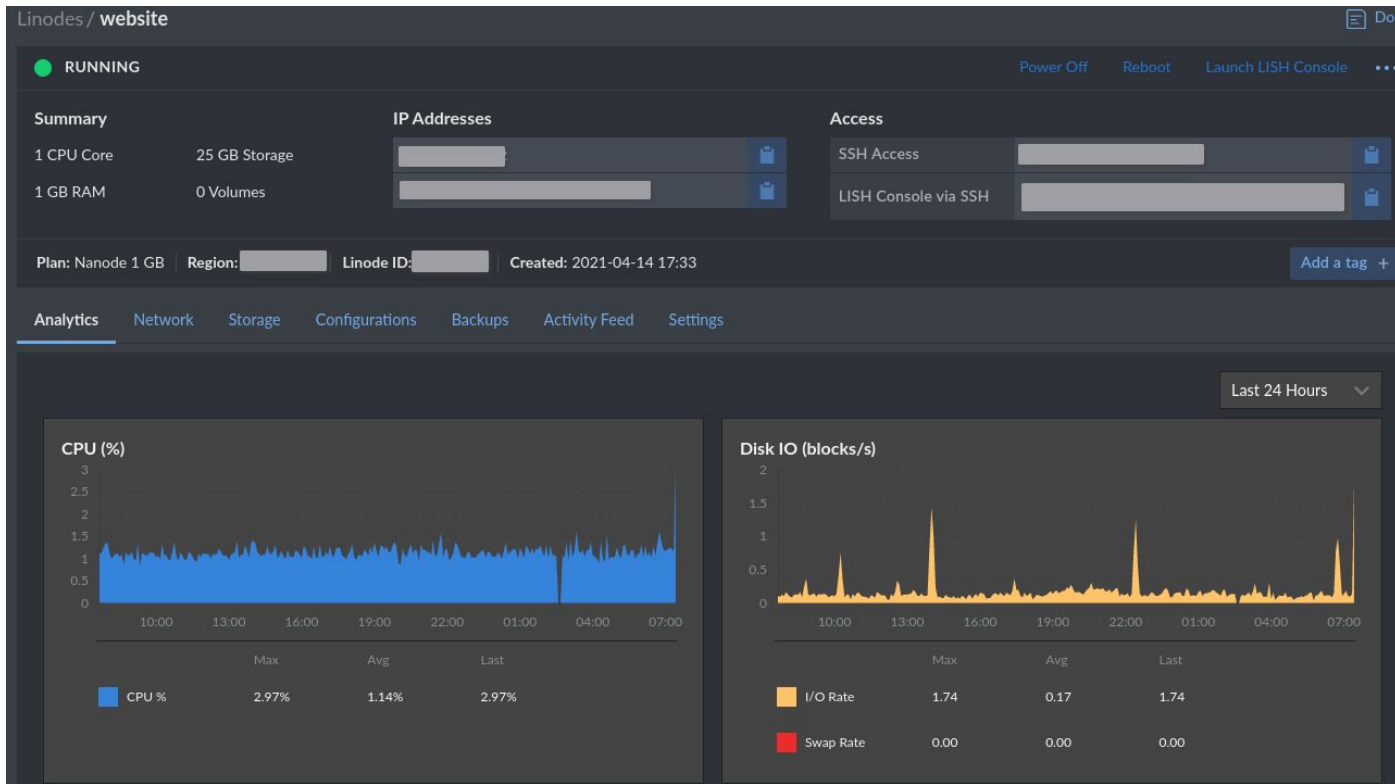
- Independent
- Good interface
- Competitive price
- Good uptime
- Manages both VPSs and DNS

Linode Dashboard

Distro

Alpine Linux

- Simple
  - OpenRC instead of Systemd
  - Very few packages installed by default
  - Easy docker setup
- Stable
- Small by default
- Secure

My Server Config

- All config files in one repo
- Pushed to server via SSH
- All services managed via docker-compose

Follow along here: github.com/RITlug/bens-server-config

Server Setup

```
# Update system
apk -U upgrade
# Installed docker and docker-compose
apk add docker docker-compose

# Start docker daemon on boot
rc-update add docker boot
# Start docker daemon now
service docker start

# Install cron job
ln -s /root/gmi-crates-update.sh /etc/periodic/daily/
```

That's it!

Start Everything

```
docker-compose up -d
```

We Zoomin'!

docker-compose

```
nginx:
  image: nginx:alpine
  restart: unless-stopped
  environment:
    - NGINX_ENTRYPOINT_QUIET_LOGS=1
  ports:
    - "80:80"
    - "443:443"
  volumes:
    - /srv/www:/var/www
    - ./benaaron.dev.conf:/etc/nginx/conf.d/benaaron.dev.conf
    - ./sashnoraa.gay.conf:/etc/nginx/conf.d/sashnoraa.gay.conf
    - ./fullchain.pem:/fullchain.pem
    - ./privkey.pem:/privkey.pem
```

Data

All data store in *data/* folder for easy backup and restore

Nginx

```
server {
    listen              80;
    listen              443 ssl http2;
    server_name         benaaron.dev;
    root                /var/www/benaaron.dev;
    index               index.html;
    error_page          404 /404.html;
    gzip                on;
    server_tokens       off;
    charset             utf-8;

    add_header          Permissions-Policy 'interest-cohort=()';
    add_header          X-Frame-Options deny;
    add_header          Vary Accept-Encoding;

    ssl_certificate     /fullchain.pem;
    ssl_certificate_key /privkey.pem;

    location /rust-docs {
        alias /var/www/rust-docs/;
    }
}
```

Certificate Generation

Certbot cert generation with Linode DNS plugin

```
certbot certonly --dns-linode \
    --dns-linode-credentials ./linode.txt -d \
'benaaron.dev,*.benaaron.dev,sashanoraa.gay,*.sashanoraa.gay' \
    --work-dir ./cerbot/wrk --config-dir ./cerbot/conf \
    --logs-dir ./cerbot/log -m ben@benaaron.dev
```

Keep certbot contained to this folder

Container

Use existing container or build my own

```
FROM python
RUN pip install radicale
CMD ["python3", "-m", "radicale", "--config", "/data/config.ini"]
```

Upload custom containers to docker hub for easy deployment

```
docker build -t zethra/radicale .
docker push zethra/radicale
```

Questions?

Full config here: github.com/RITlug/bens-server-config