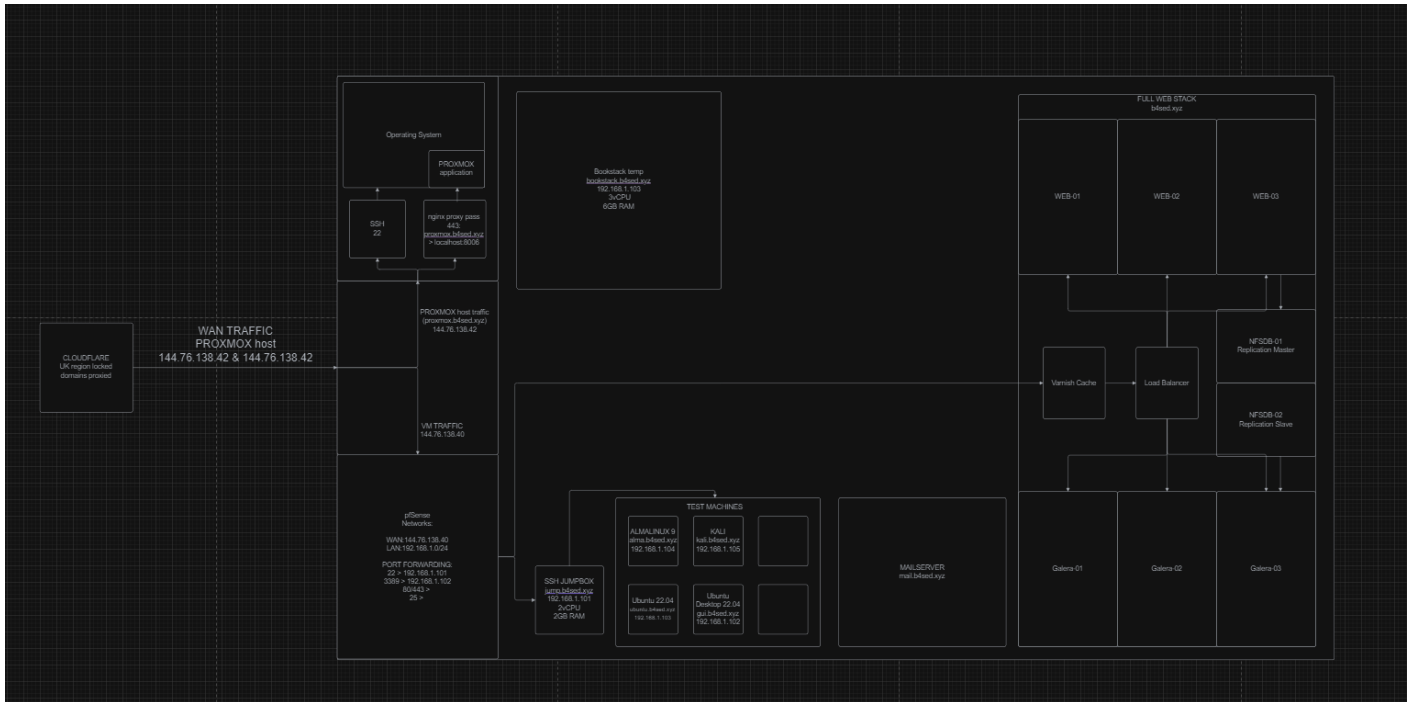


My Solution

notes regarding my personal server solution, feel free to have a look

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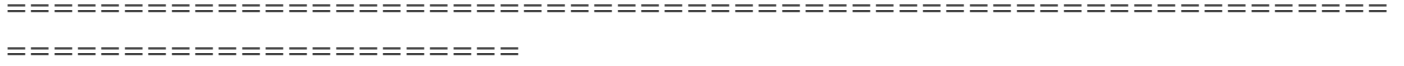
Overview



Proxmox

Proxmox

Installing & launching a PROXMOX server



Installation

PROXMOX ISO download:

<https://www.proxmox.com/en/downloads/proxmox-virtual-environment/iso>

Proxmox

Network Configuration

PfSense

Networking for my VMs is done through pfSense, which is basically an router/firewall OS installed onto a VM, and configured to pass network traffic from the WAN network (144.76.138.40) to the LAN network (192.168.1.1/24) via a network bridge.

For more information on my PfSense configuration, see [here](#).

pfSense

Self Hosted

Self Hosted

Flame

Flame is essentially just a web dashboard for accessing your other self hosted apps.

Installation

<https://github.com/pawelmalak/flame/wiki/Installation-without-Docker#prerequisites>

Self Hosted

BookStack

Bookstack is a self-hosted notes platform that you're currently using to read this.

Installation

<https://jardin.icamole.site/books/bookstack/page/installation>

Backup and restore process

<https://www.bookstackapp.com/docs/admin/backup-restore/>

Side note on the restore process - I opted to use this method for migrating my existing bookstack configuration for Hetzner Cloud to Hetzner Bare-Metal. While the migration process itself wasn't too difficult, I did run into a few issues - most likely because I was also migrating from docker to none-docker. TLDR; you may have to manually create some of the MySQL table columns.

Self Hosted

Firefly 3

Firefly 3 is a self hosted finance tracking application.

Self Hosted

Planka

Planka is a self hosted 'to-do-list' application.

Self Hosted

Authelia

Authelia is a 2FA application that I use for protecting access to my web apps.

Backups

Backups

Off-Site Backups

Backups

Local Backups

Local backups are performed via cronjobs configured on a per server basis, depending on the files & databases required.

BookStack Backups

Database backups are performed using the mysqldump command, and using a dedicated 'backup' mysql user, with read only privilege:

```
##CREATE MySQL Backups User##
CREATE USER 'backup'@'localhost' IDENTIFIED BY 'password';

##GRANT Privilege to Backup User##
GRANT SELECT ON *.* TO 'backup'@'localhost';

##pull in update mysql user privilege
flush privileges;

##Give MySQL default mysqldump user options##
vim /root/.my.cnf
[mysqldump]
user=bookstack
password=password

##restart mysql##
systemctl restart mysql

##Cronjob for backups to run##
crontab -e
0 23 * * * DATE=`date +%y-%m-%d`; mysqldump -u backup bookstack --no-tablespaces | gzip >
/bookstack-backups/database/bookstack-DATE.sql.gz | rsync -a /bookstack-
backups/database/bookstack-DATE.sql.gz root@backup.b4sed.xyz:/backups/bookstack/database |
find /bookstack-backups/database -name "*.gz" -type f -mtime +7 -delete
```

File level backups are performed using the tar command, the zipped file is then transferred to the remote backup server via rsync:

```
DATE=`date +%y-%m-%d`;tar -aP -cf /bookstack-backups/file/bookstack_file-$DATE.gz  
/var/www/BookStack |rsync -a /bookstack-backups/file/bookstack_file-$DATE.gz  
root@backup.b4sed.xyz:/backups/bookstack/file | find /bookstack-backups/file -name "*.gz" -  
type f -mtime +7 -delete
```

Bookstack Web Solution

The solution used for hosting this site.

Bookstack Web Solution

MySQL Replication

Bookstack Web Solution

DB Cluster

NEW

NEW

Update Procedure

OS Maintenance

Core Pi

```
sudo apt update  
sudo apt full-upgrade -y  
sudo apt autoremove --purge -y
```

```
sudo reboot
```

Home Pi

```
sudo apt update  
sudo apt full-upgrade -y  
sudo apt autoremove --purge -y
```

```
sudo reboot
```

NAS